

FIG. 1A

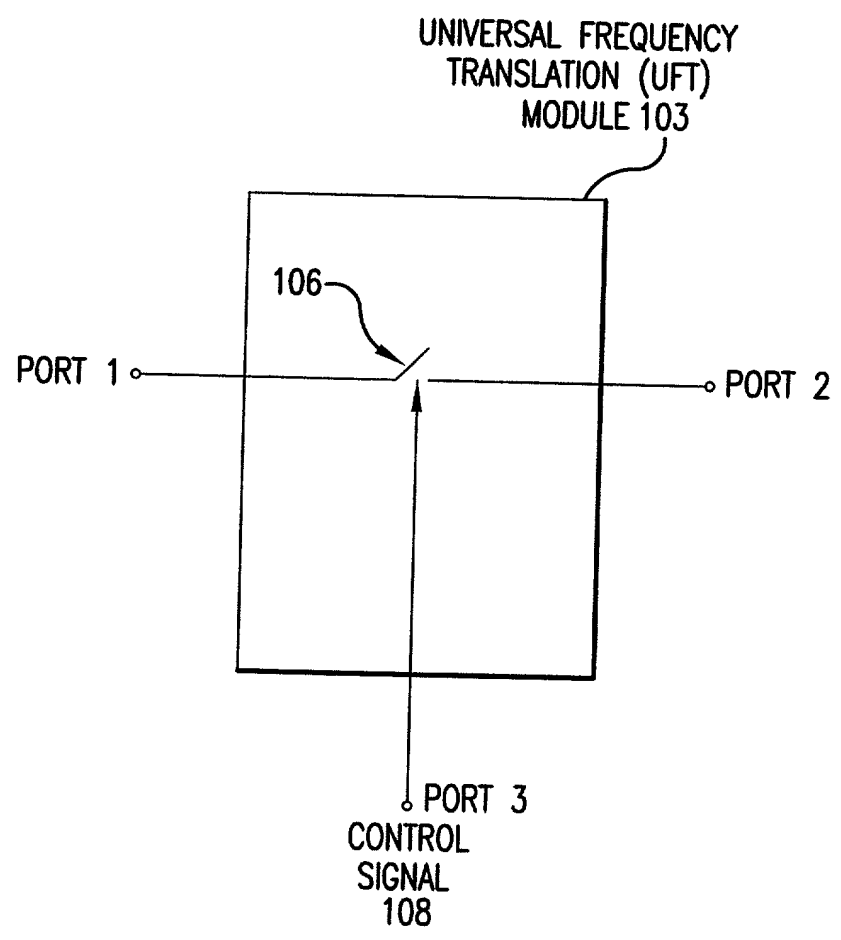


FIG. 1B

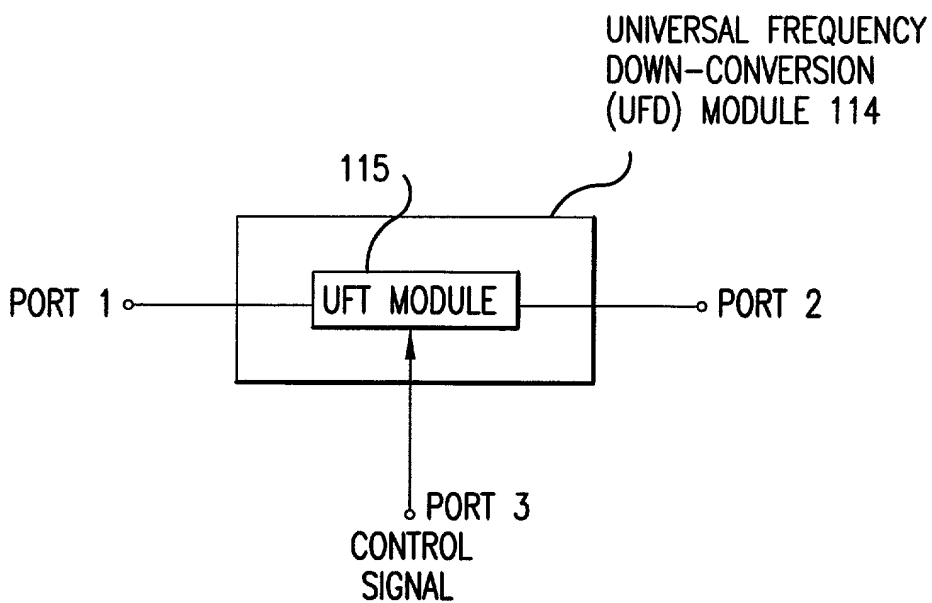


FIG. 1C

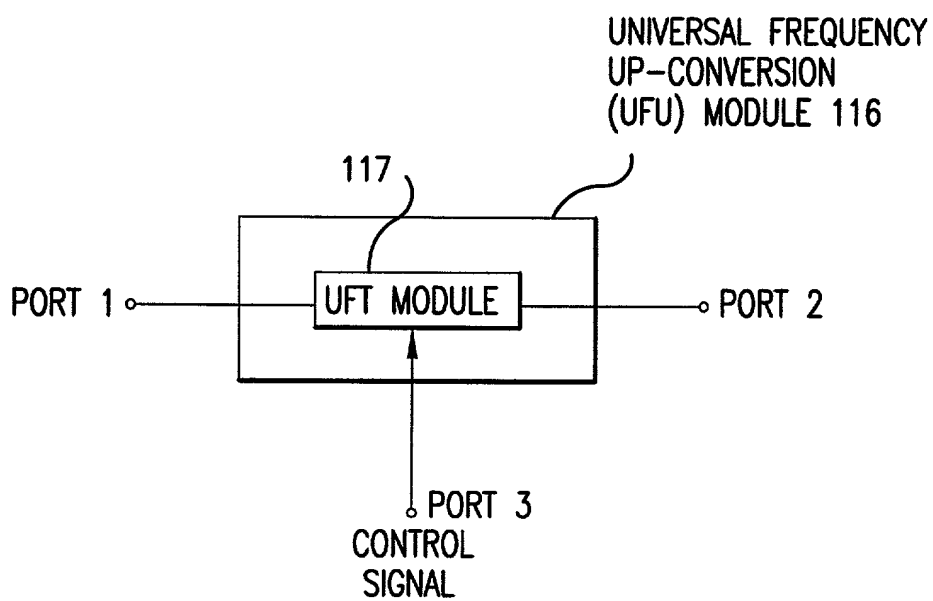


FIG. 1D

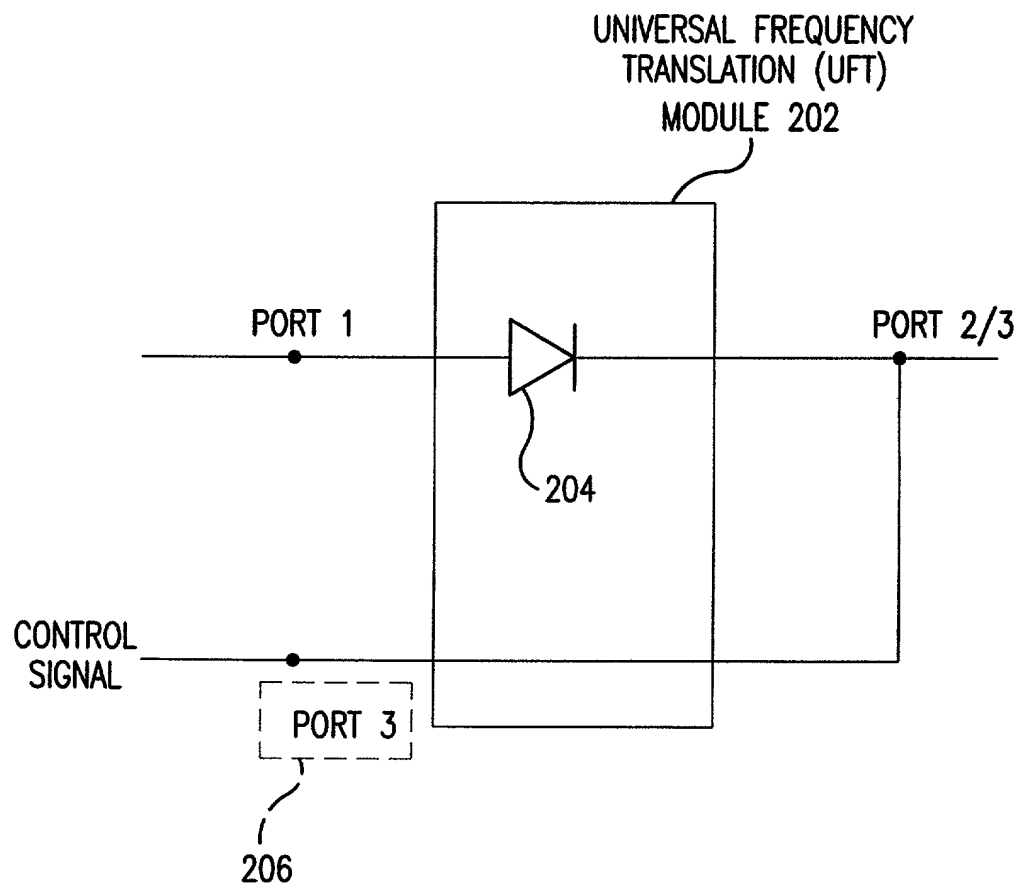


FIG. 2

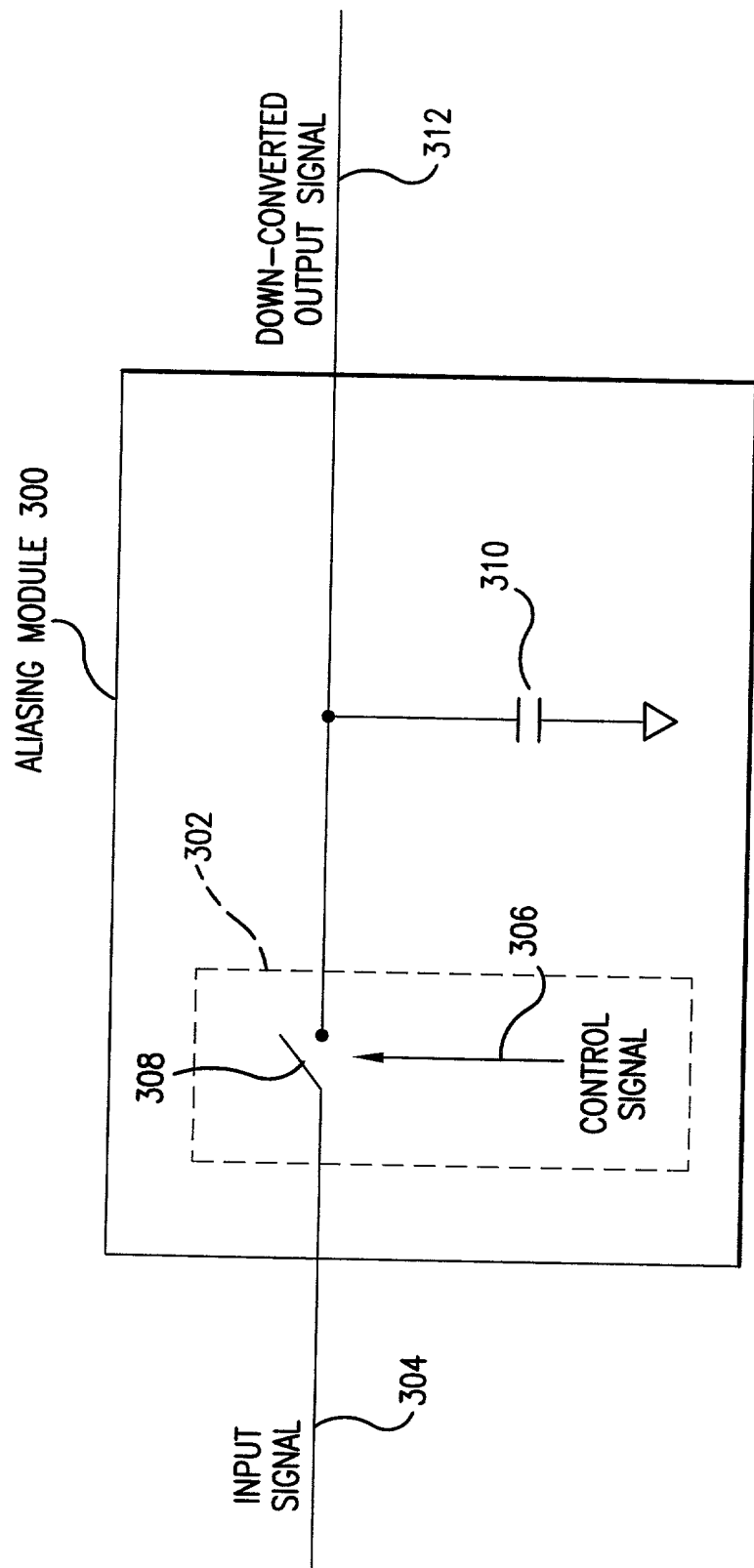


FIG. 3A

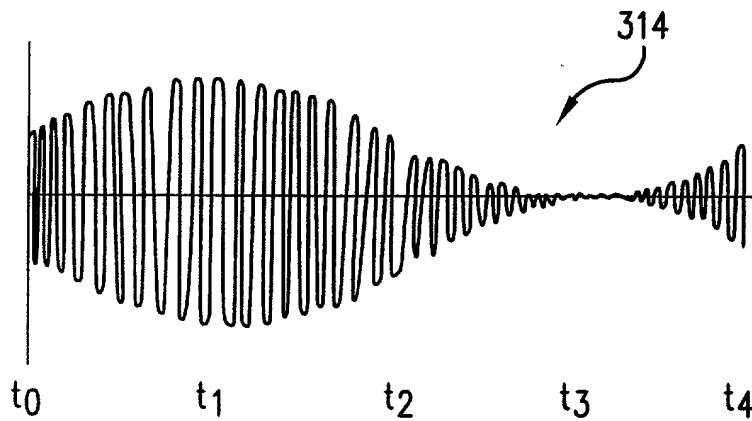


FIG. 3B

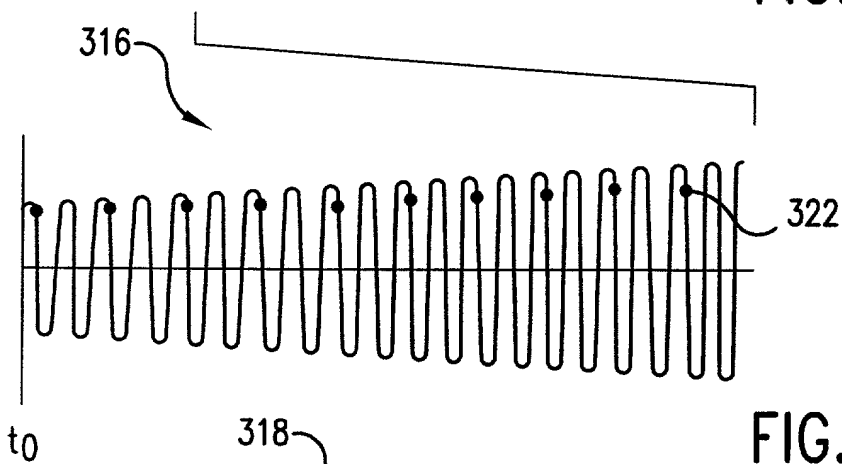


FIG. 3C

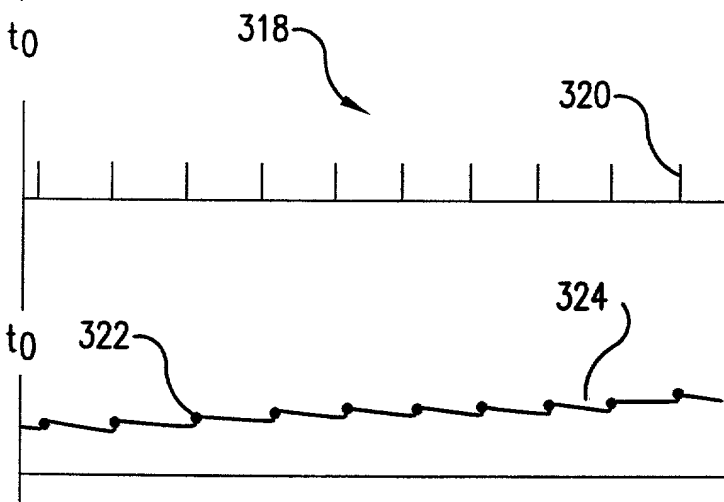


FIG. 3D

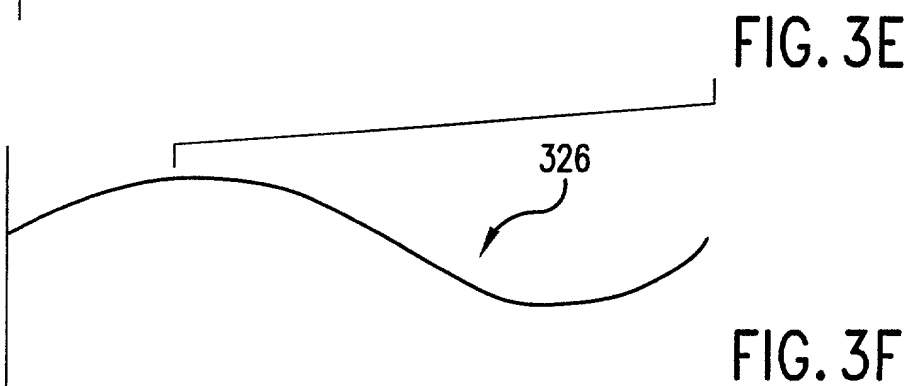


FIG. 3E

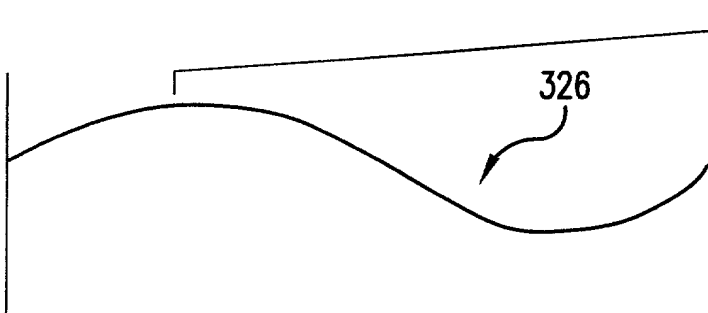


FIG. 3F

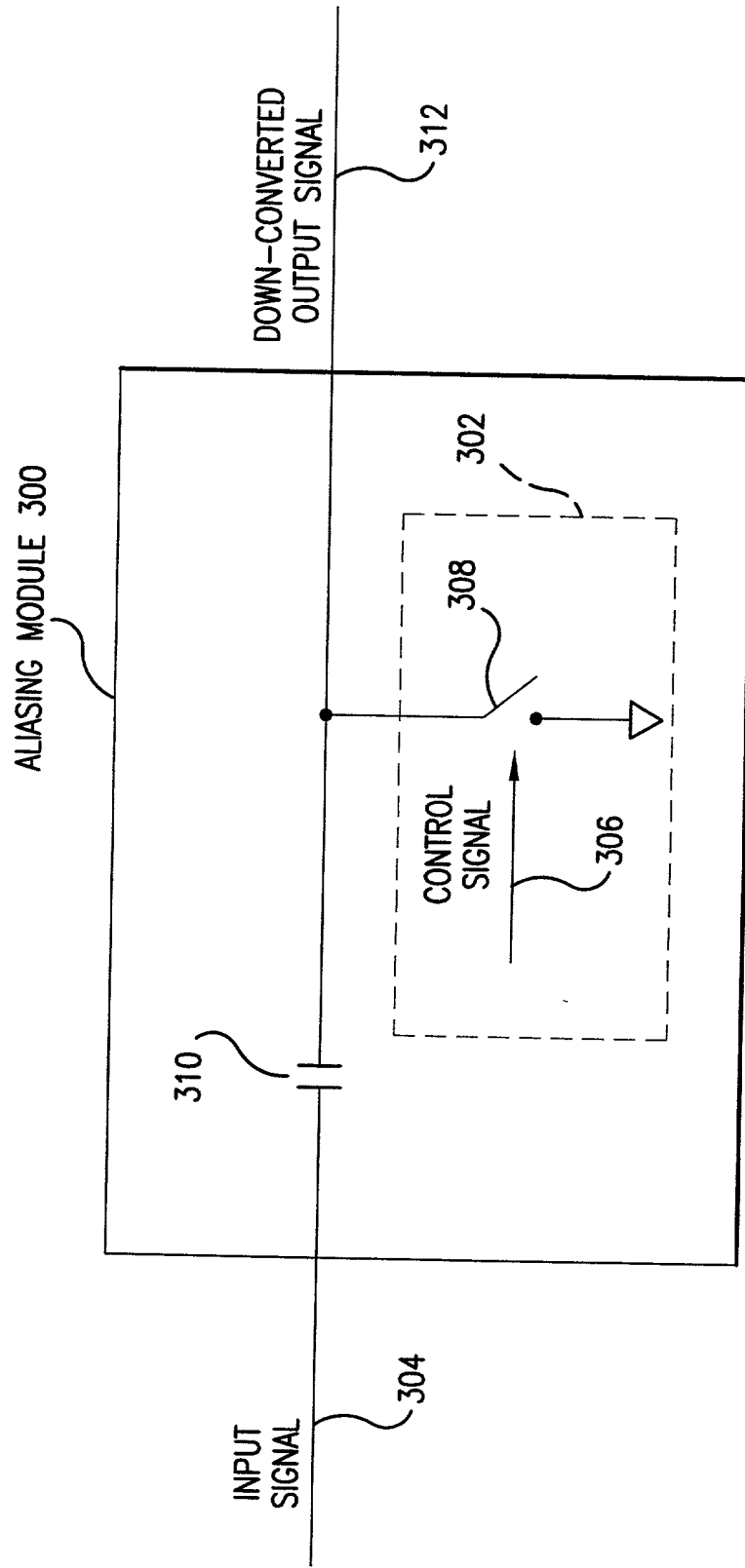


FIG. 3G

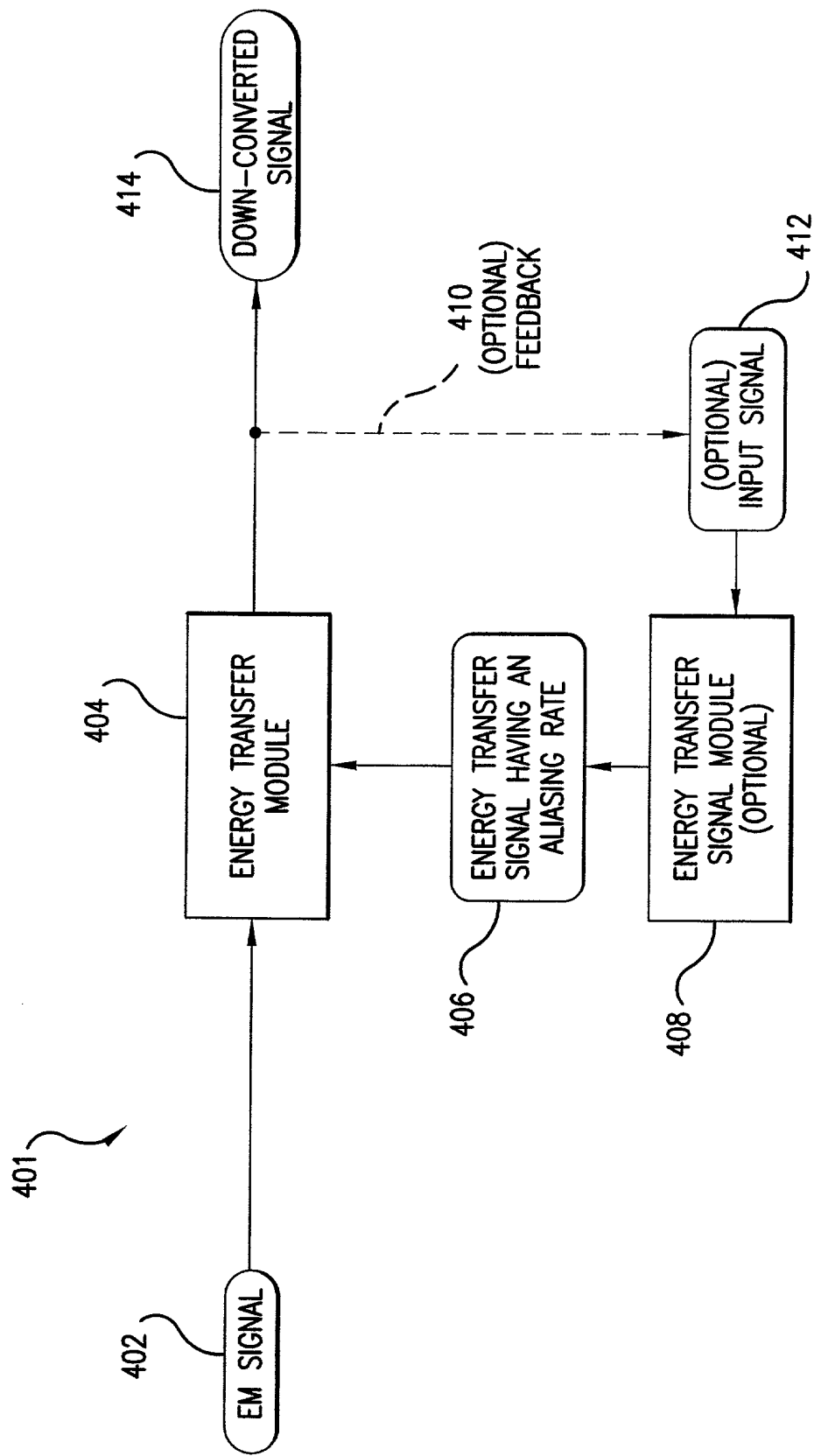


FIG. 4

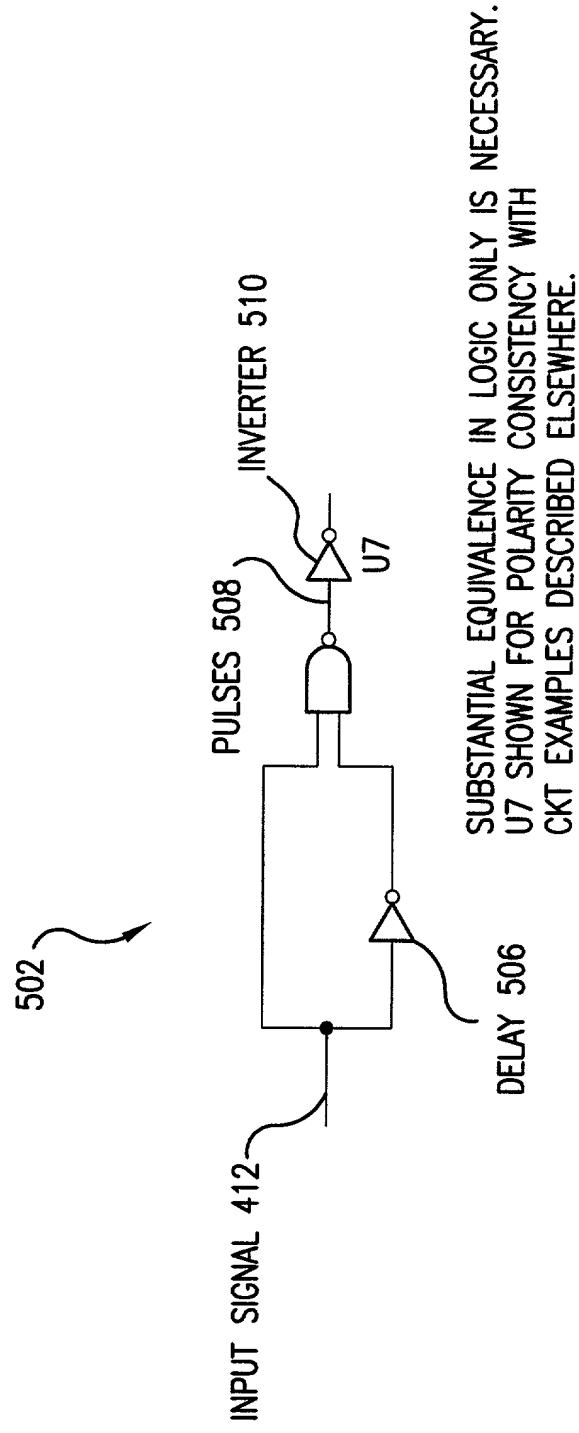


FIG. 5

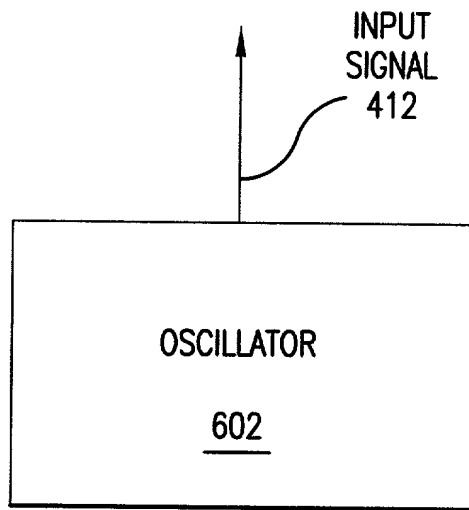


FIG. 6B

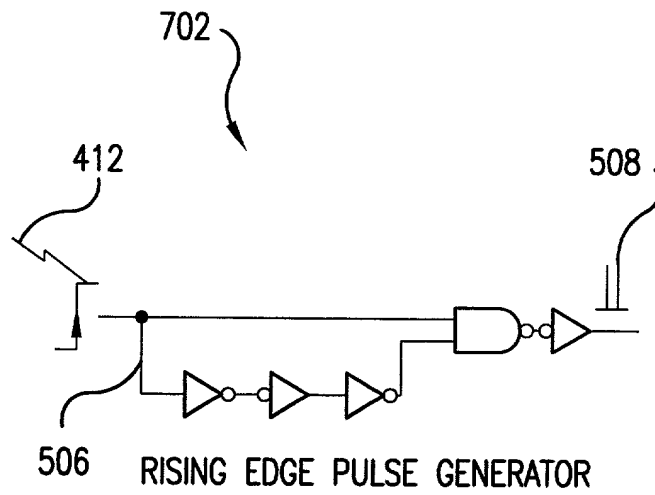


FIG. 7A

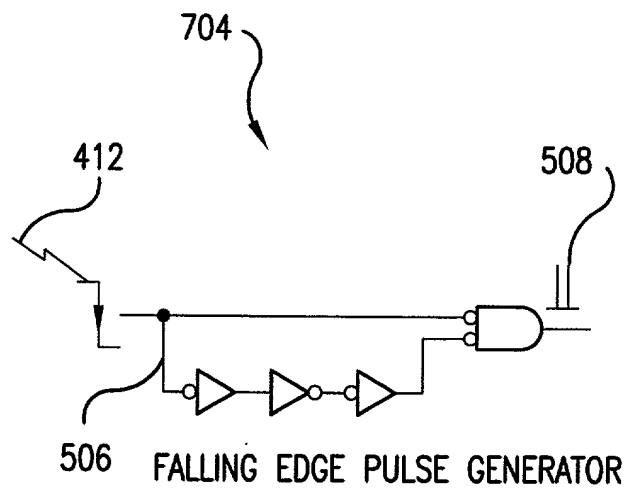


FIG. 7B

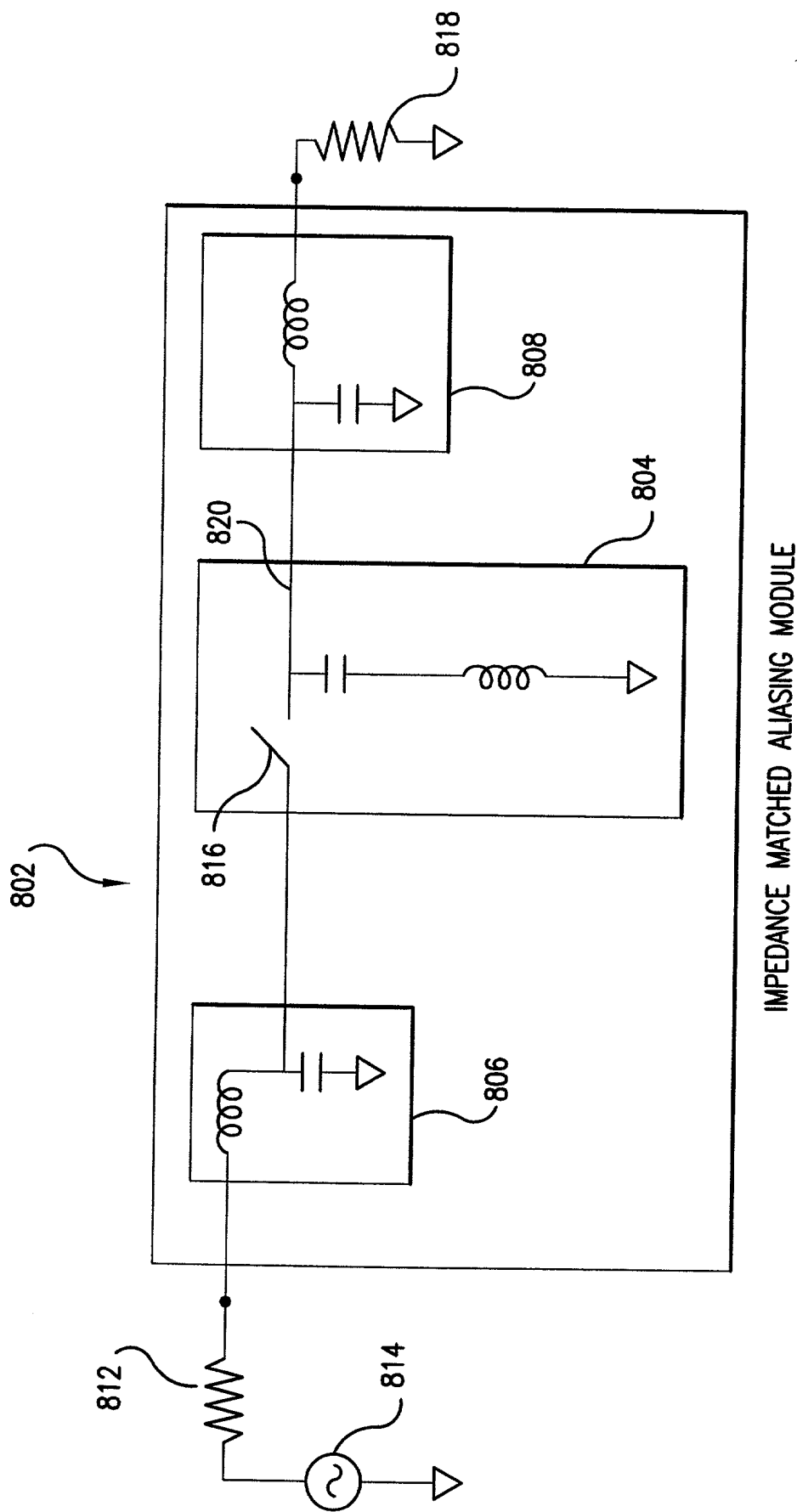
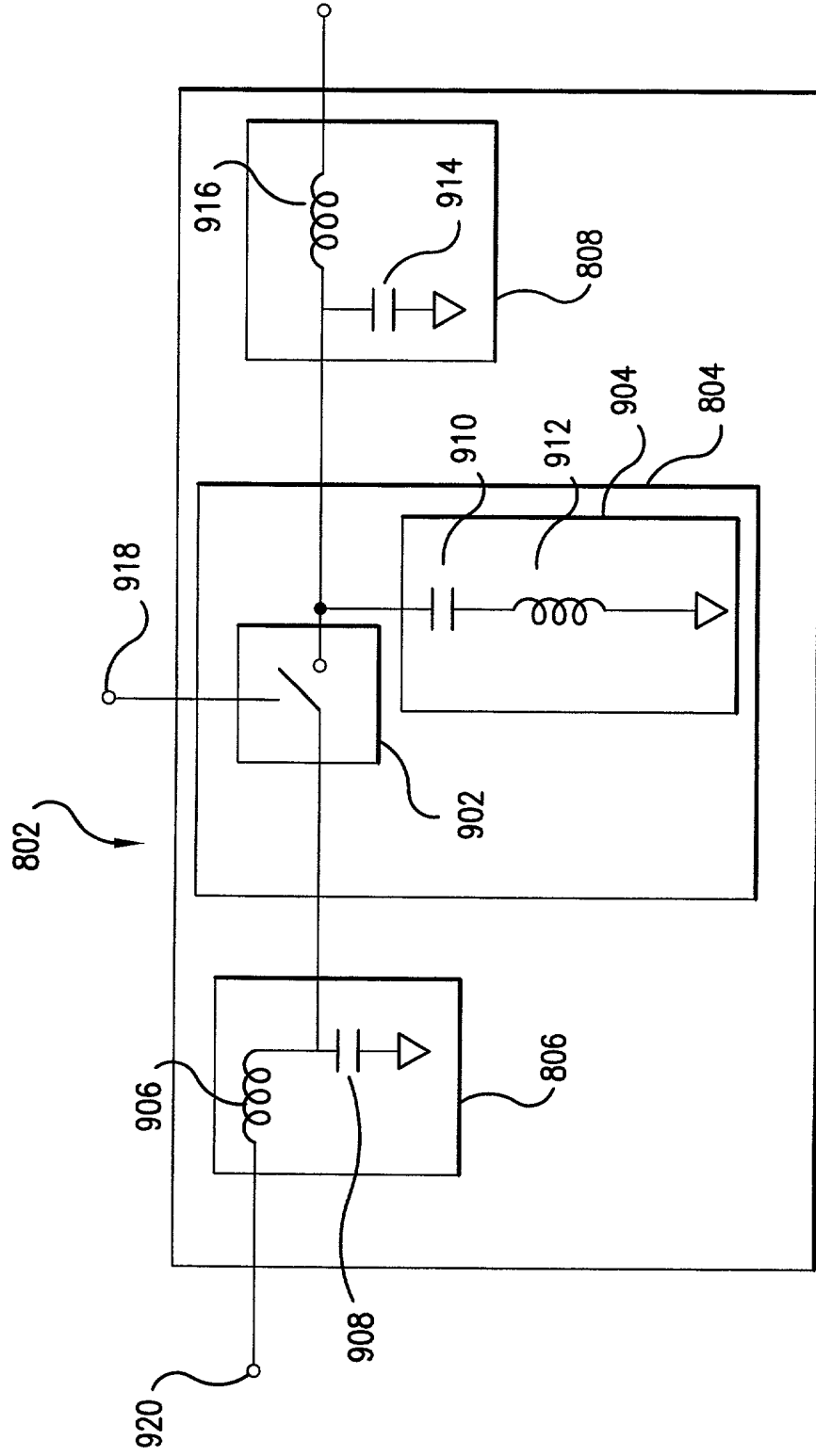


FIG. 8



ALIASING MODULE

FIG. 9

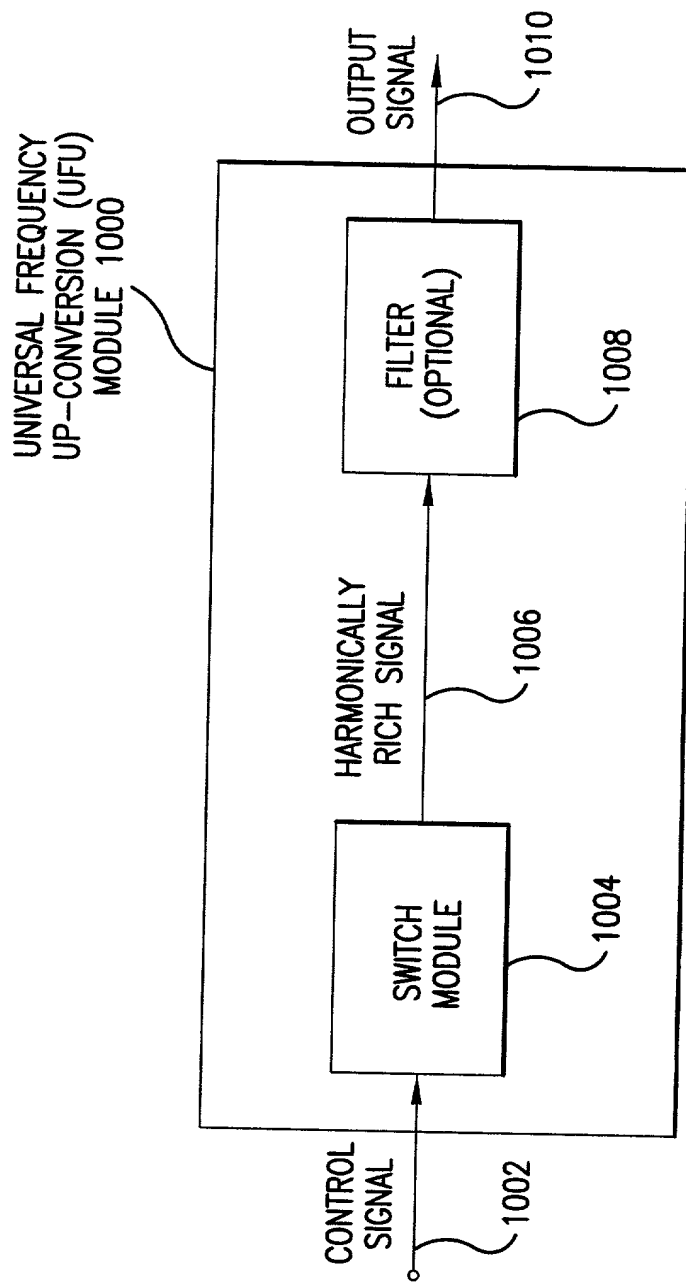


FIG. 10

UNIVERSAL FREQUENCY
UP-CONVERSION (UFU)
MODULE 1101

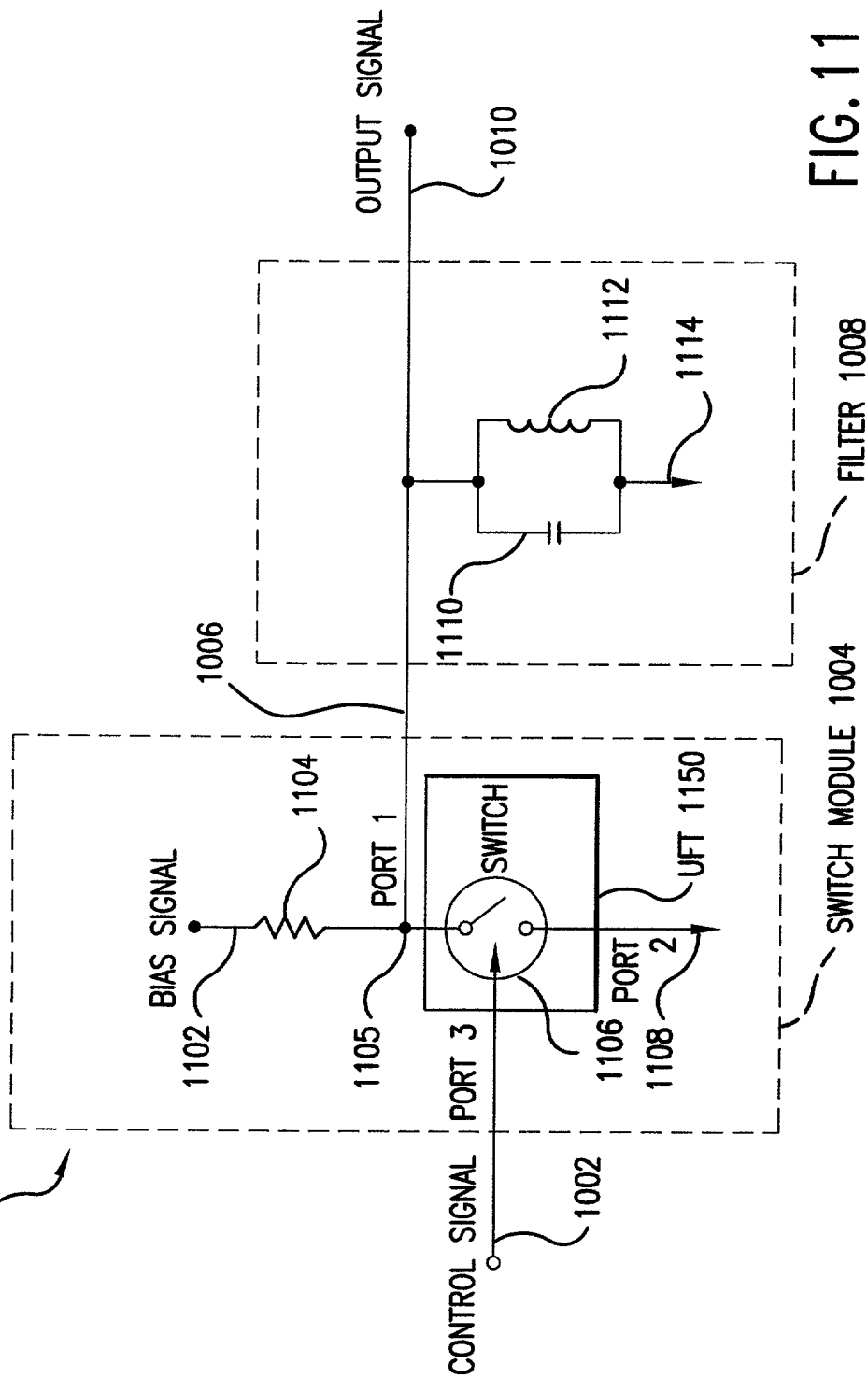


FIG. 11

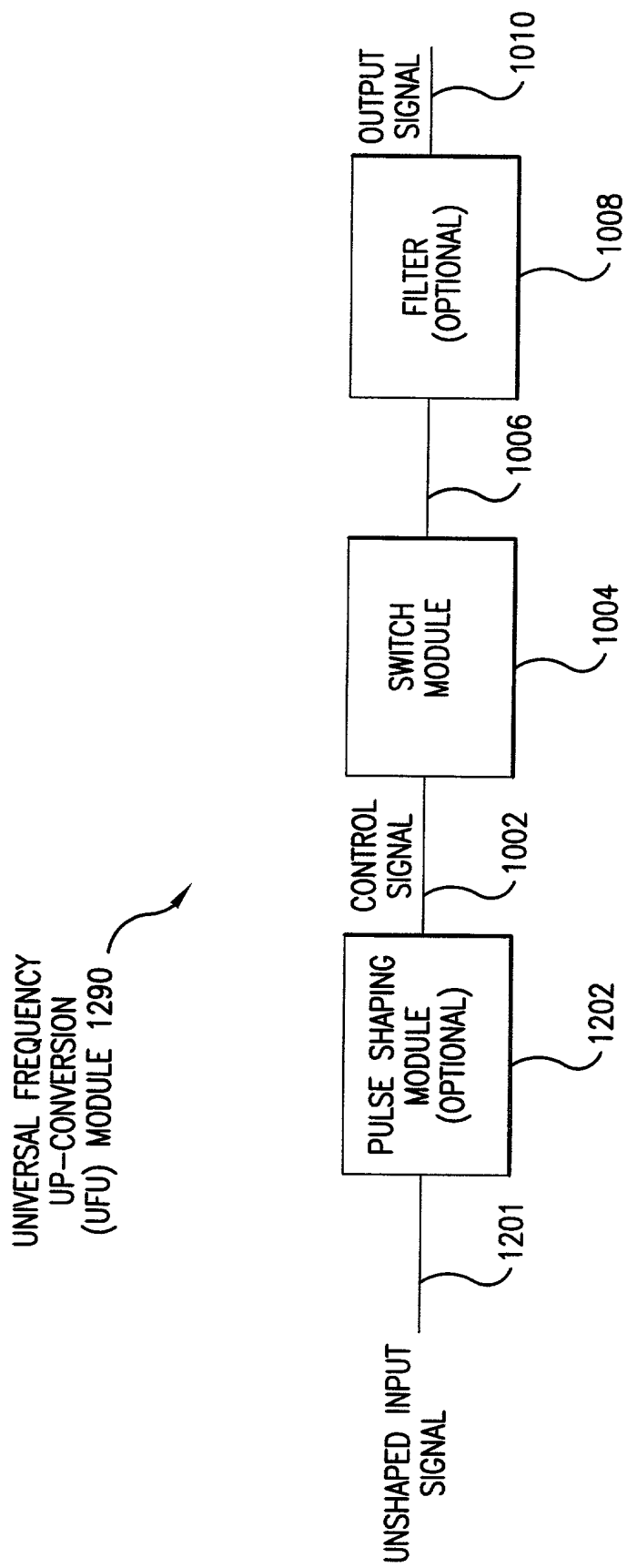


FIG. 12

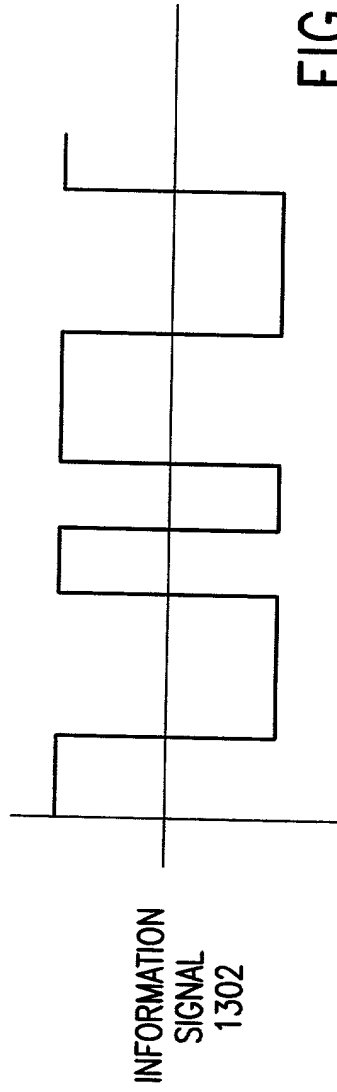


FIG. 13A

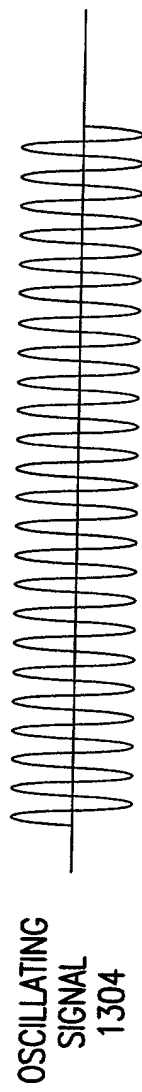


FIG. 13B

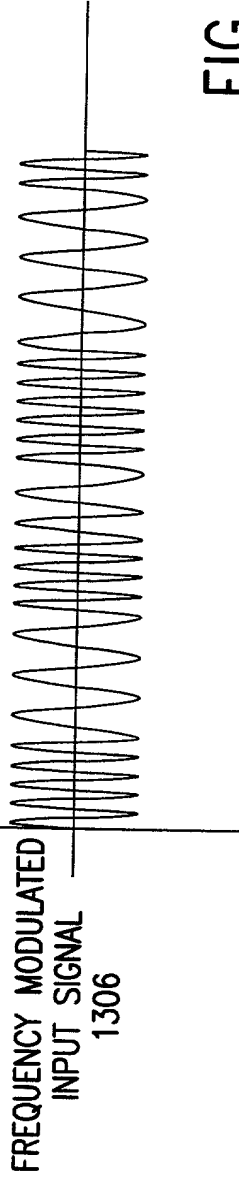


FIG. 13C

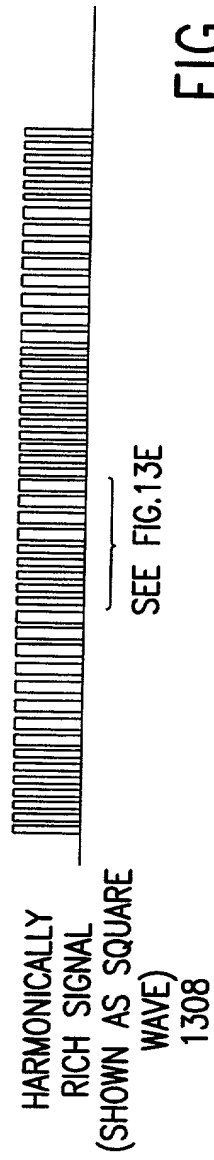
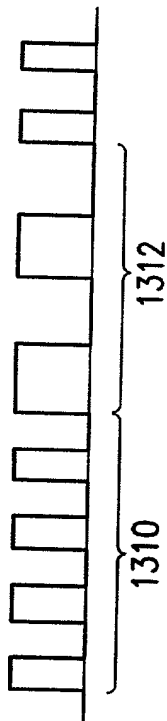


FIG. 13D

EXPANDED VIEW OF
HARMONICALLY RICH
SIGNAL 1308

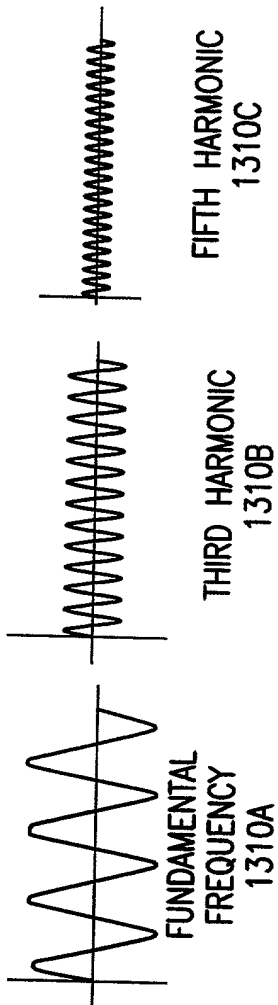


SEE FIG. 13F

SEE FIG. 13G

FIG. 13E

HARMONICS OF
SIGNAL 1310
(SHOWN SEPARATELY)



HARMONICS OF
SIGNAL 1312
(SHOWN SEPARATELY)

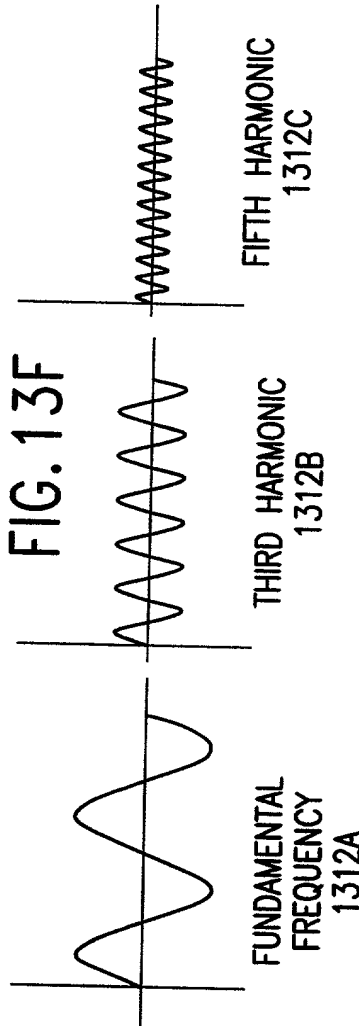


FIG. 13F

FIG. 13G

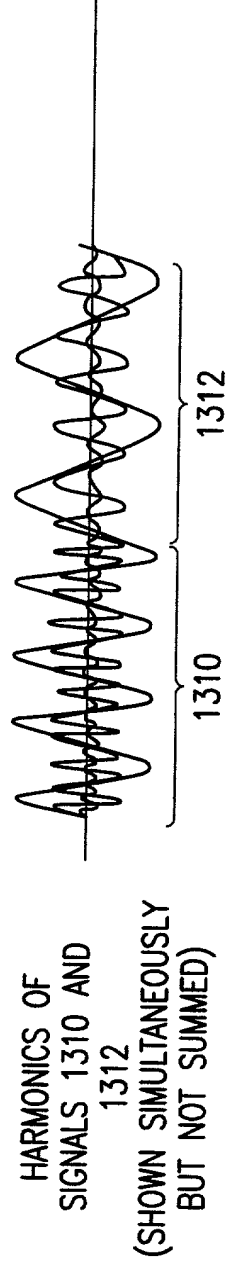


FIG. 13H

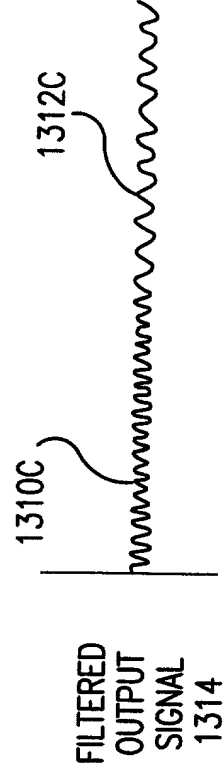


FIG. 13I

UNIFIED DOWNCONVERTING AND
FILTERING (UDF) MODULE 1402

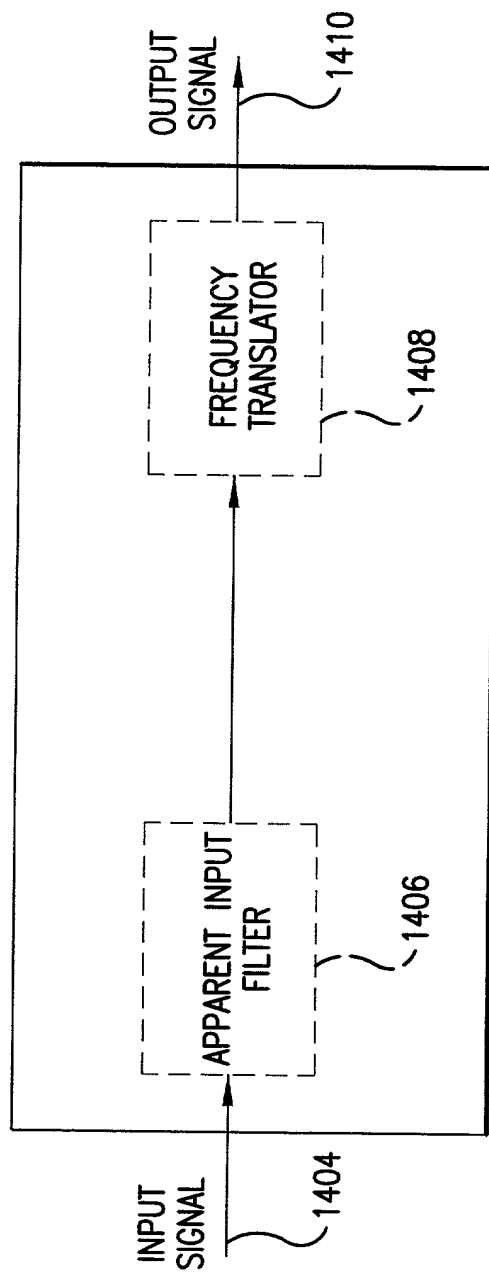


FIG. 14

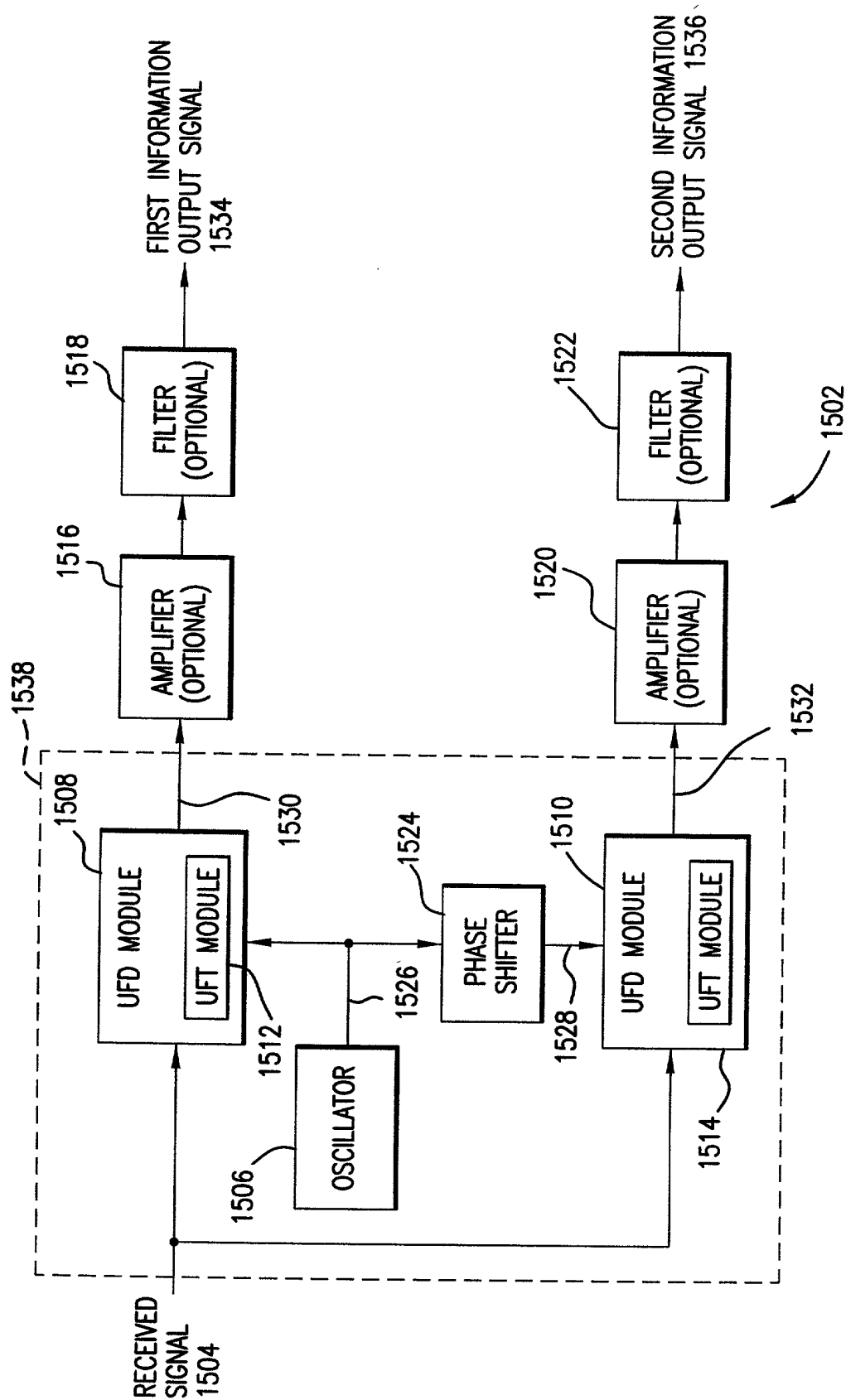


FIG.15

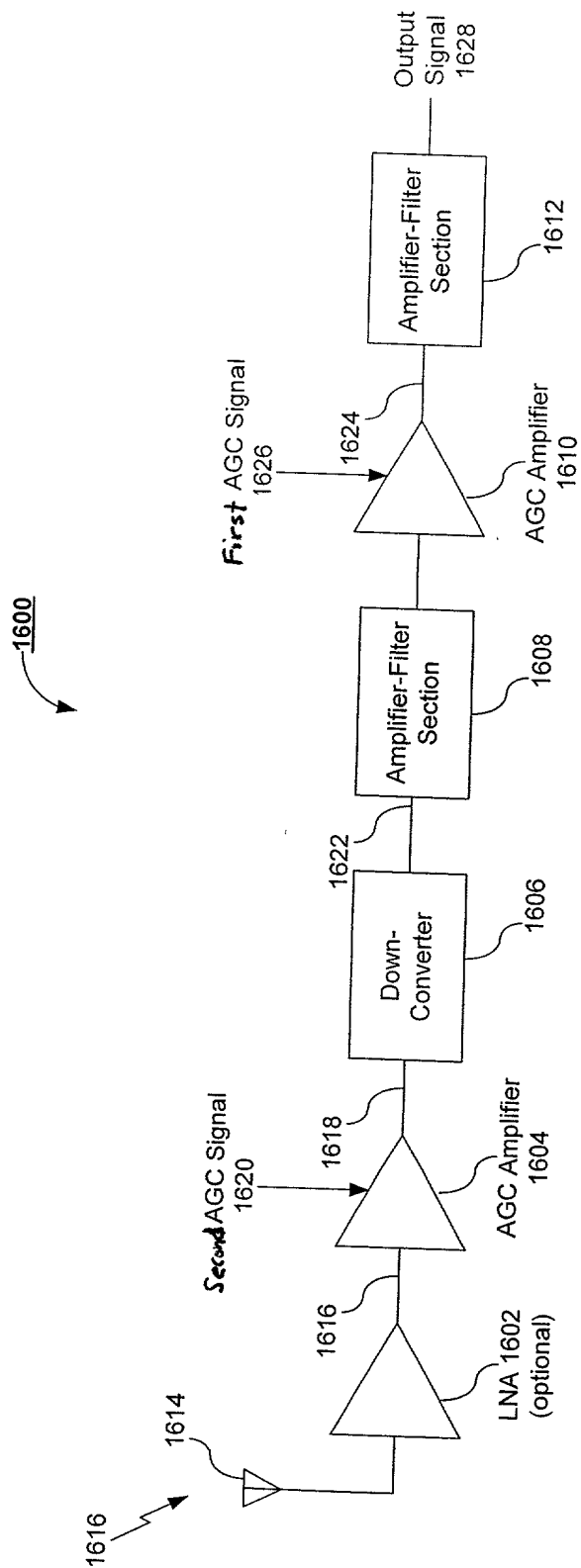


FIG. 16

1700

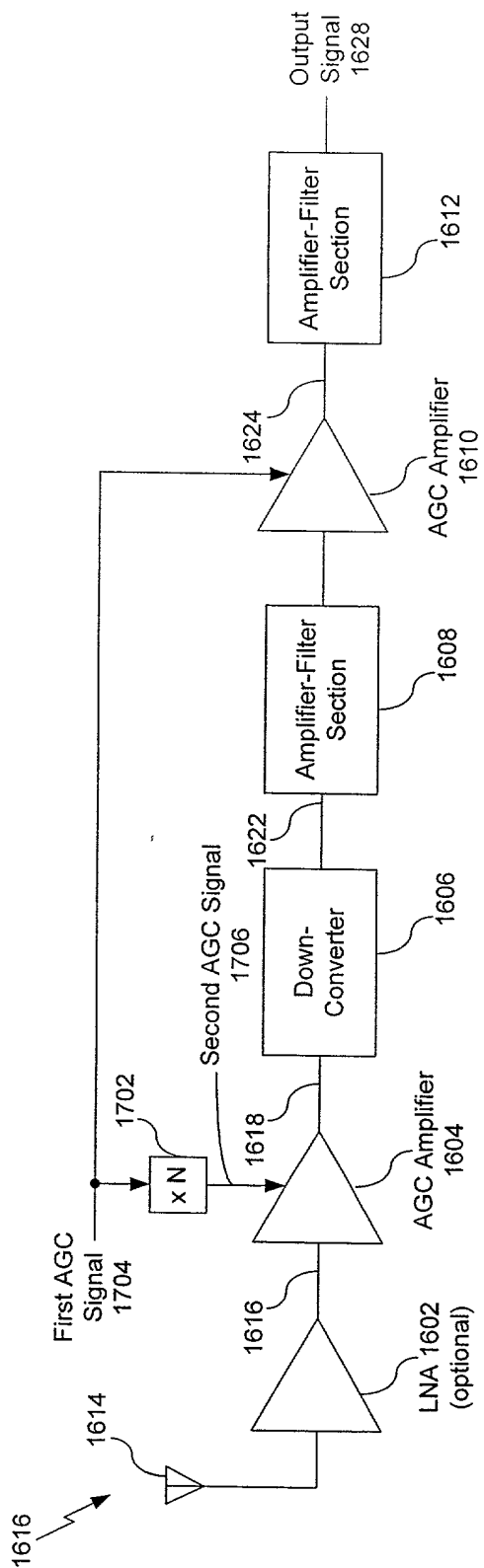


FIG. 17

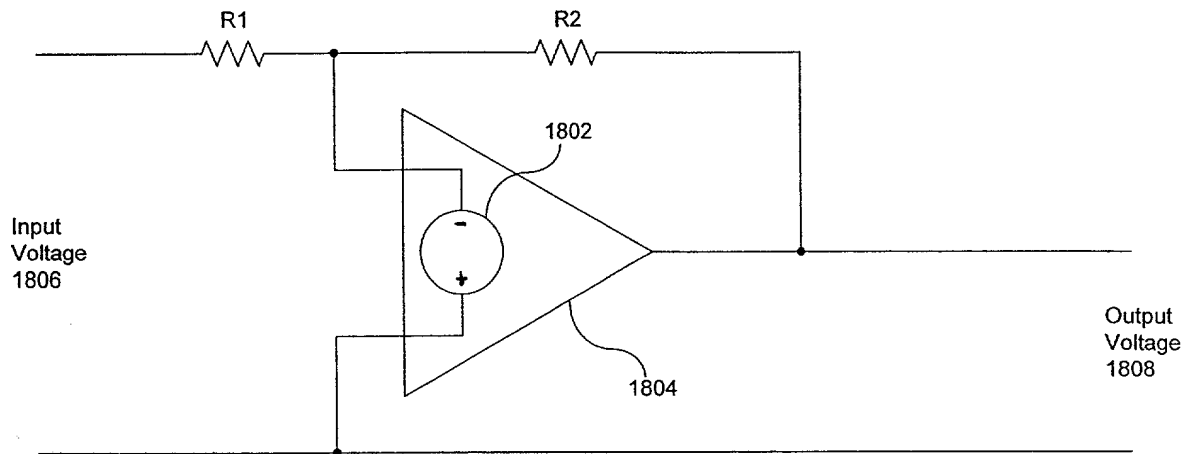


FIG. 18

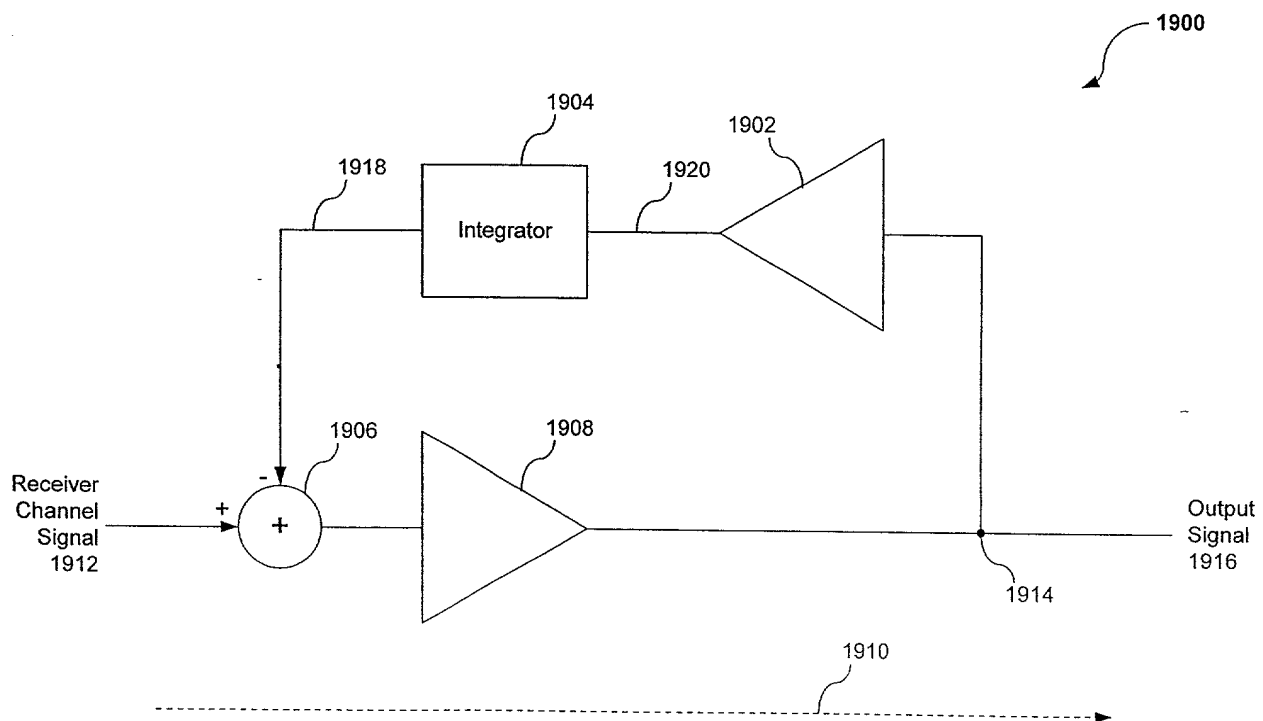


FIG. 19

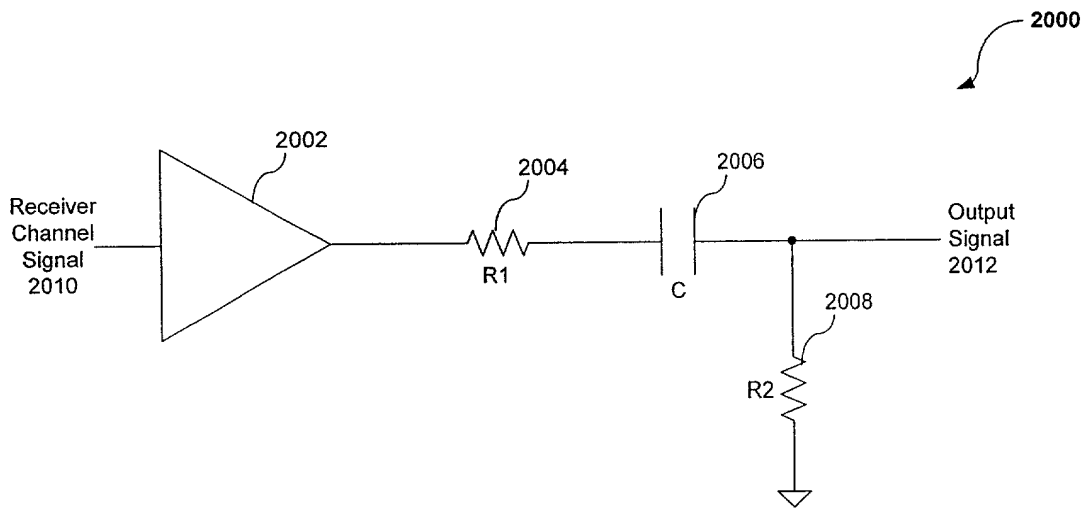


FIG. 20

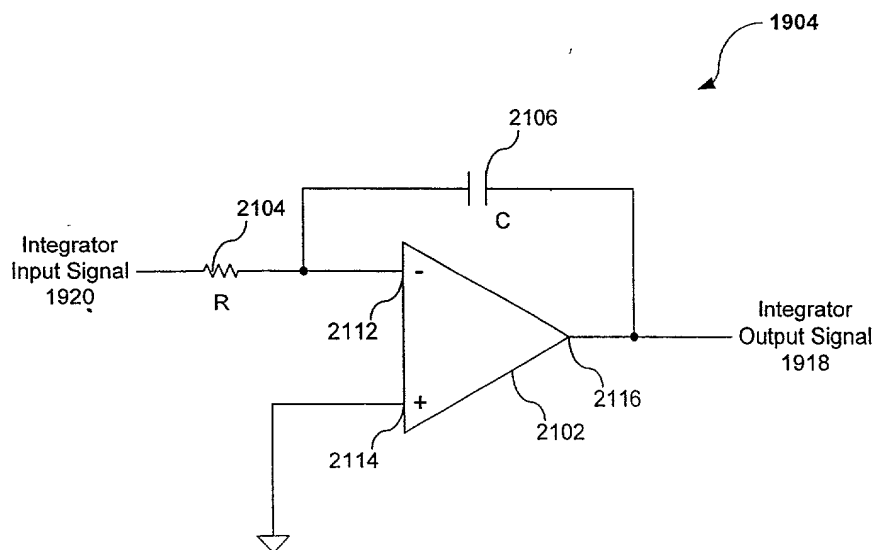


FIG. 21

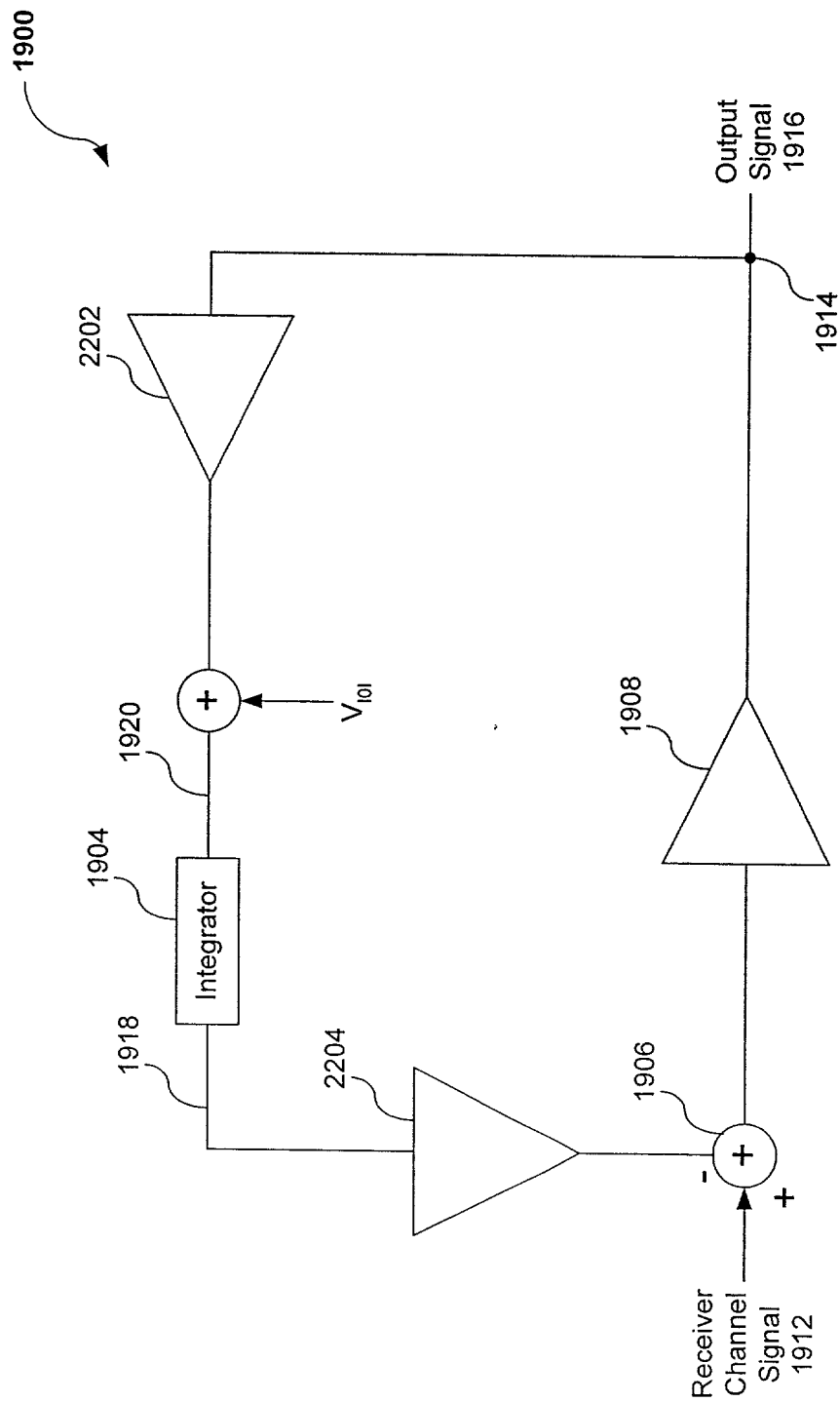


FIG. 22

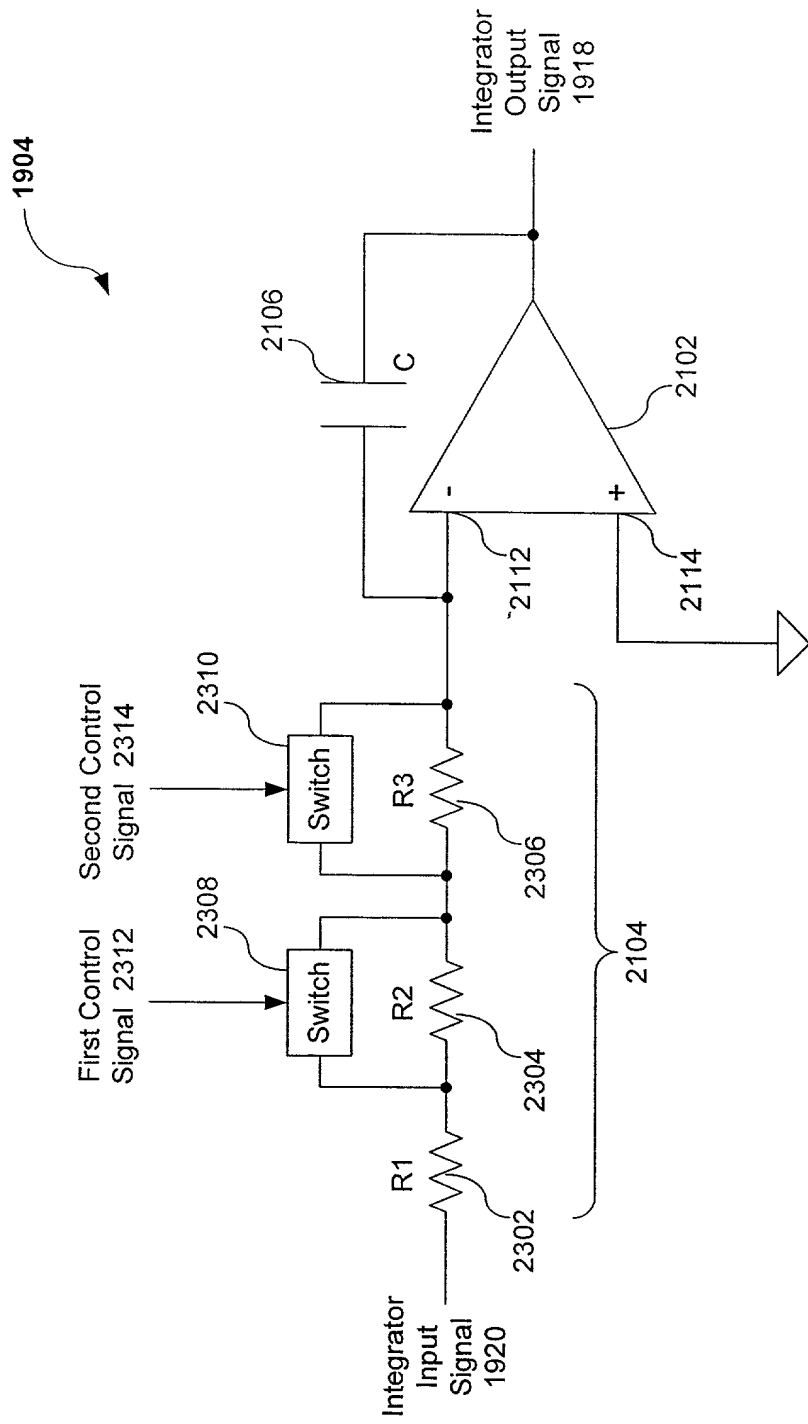


FIG. 23

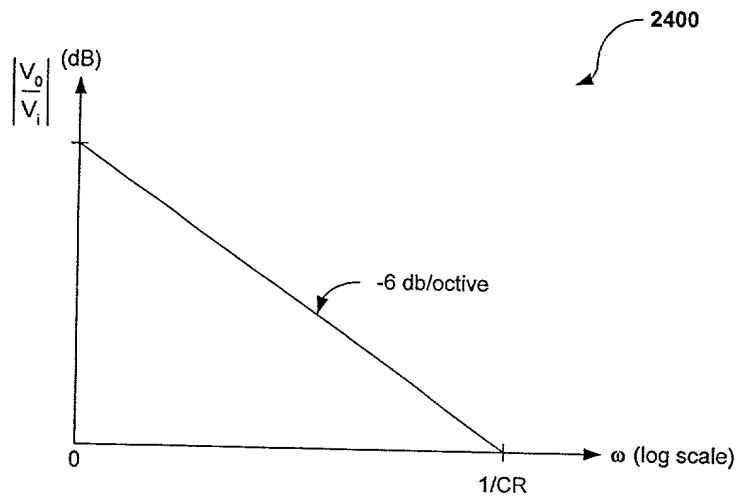


FIG. 24A

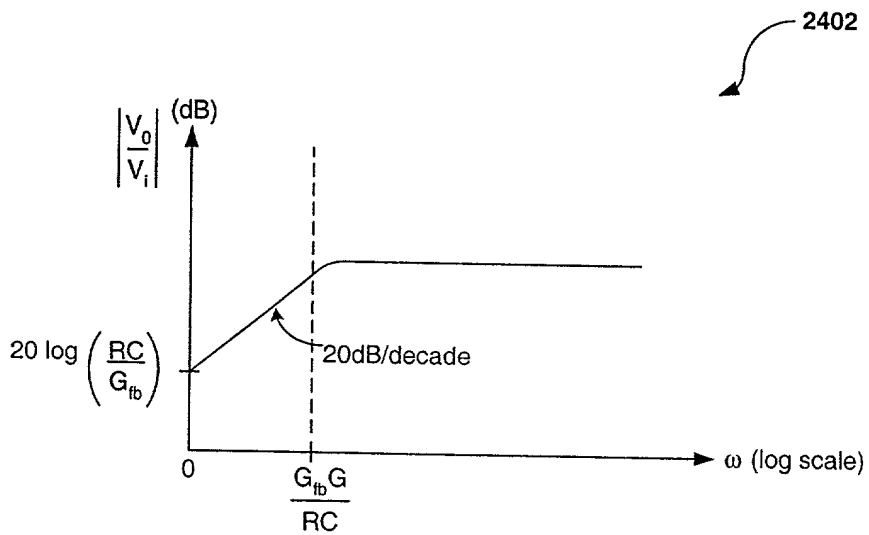


FIG. 24B

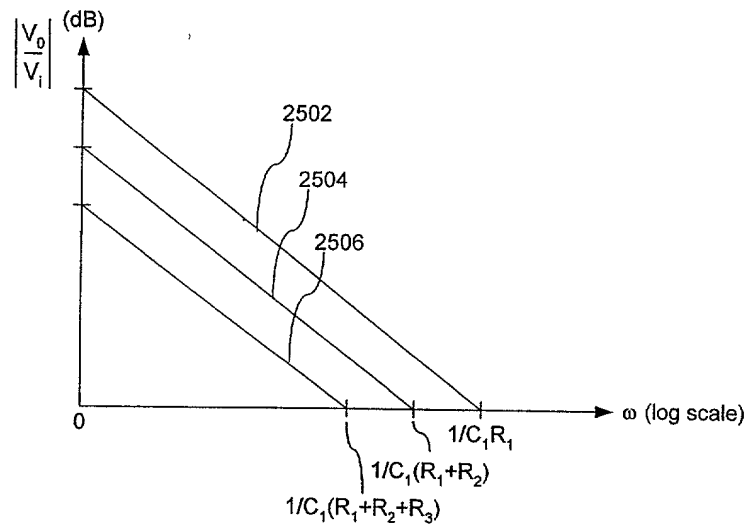


FIG. 25A

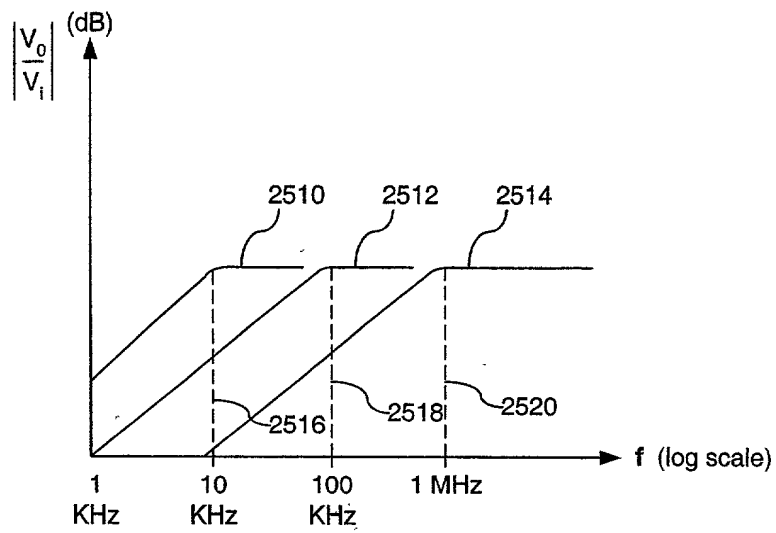


FIG. 25B

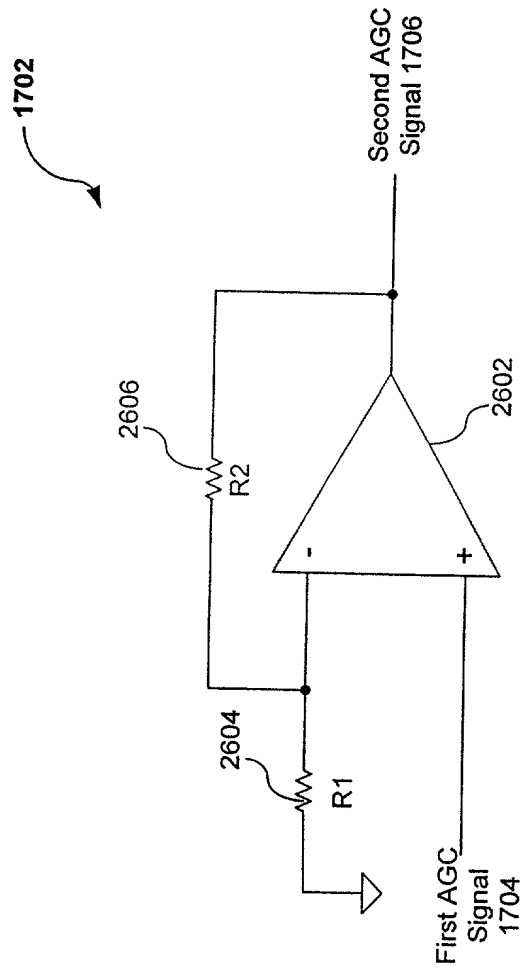


FIG. 26

2700

2702

a first receiver channel signal is received from a first receiver channel node

2704

the first receiver channel signal is integrated to generate an integrated signal

2706

the integrated signal is summed with a second receiver channel signal at a second receiver channel node

FIG. 27

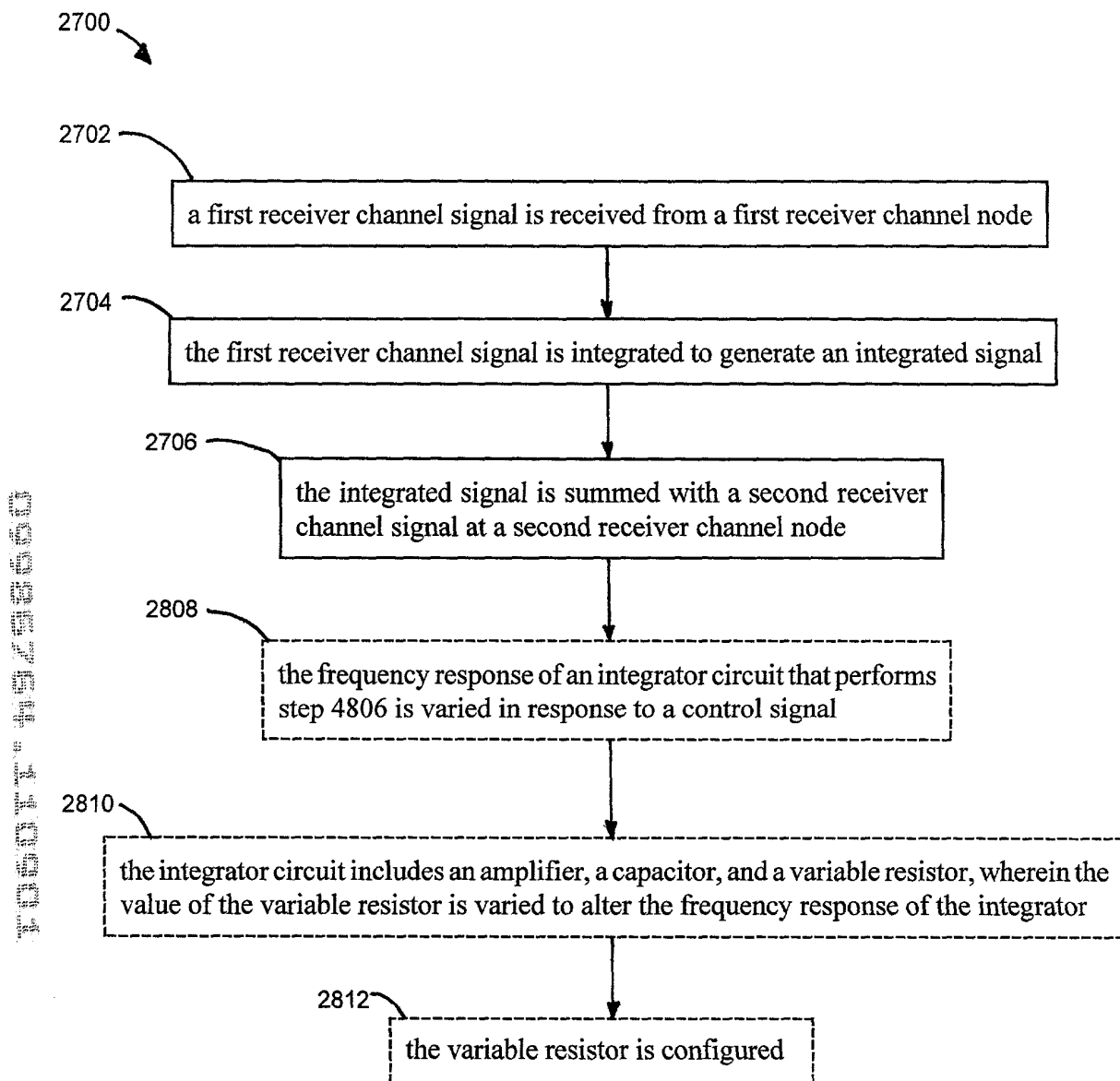


FIG. 28

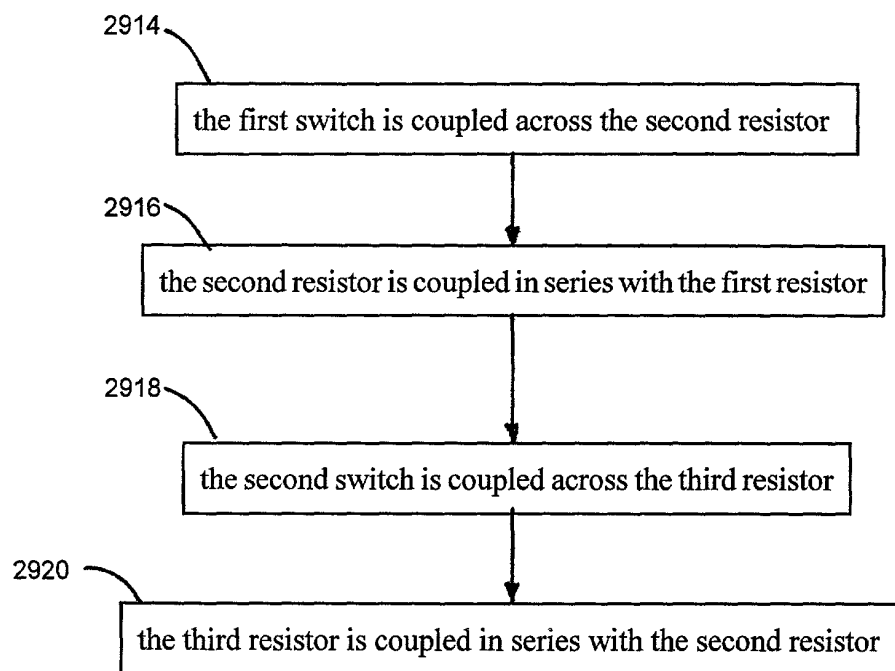


FIG. 29

3000

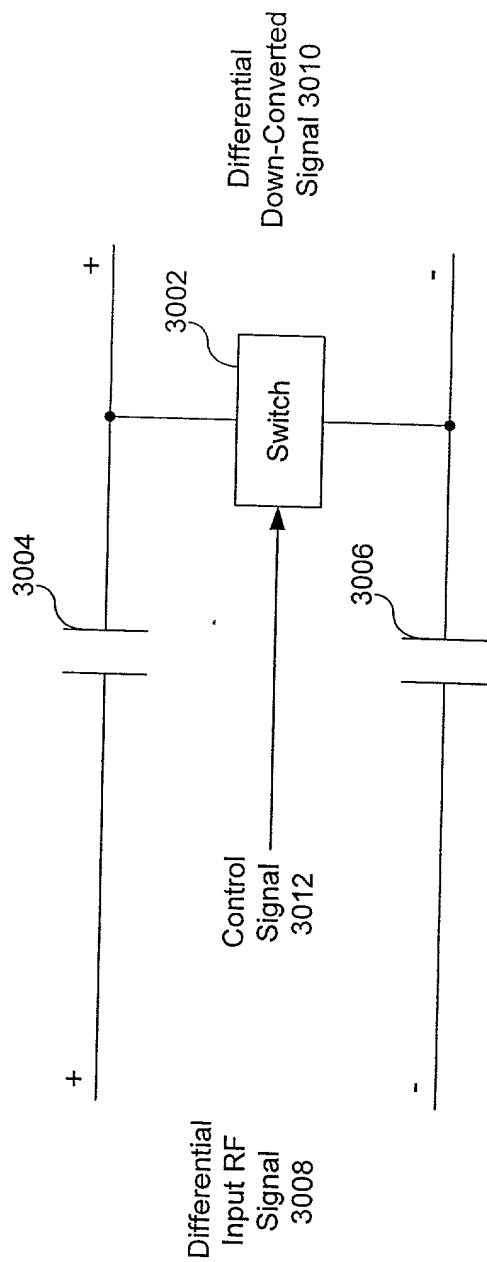


FIG. 30

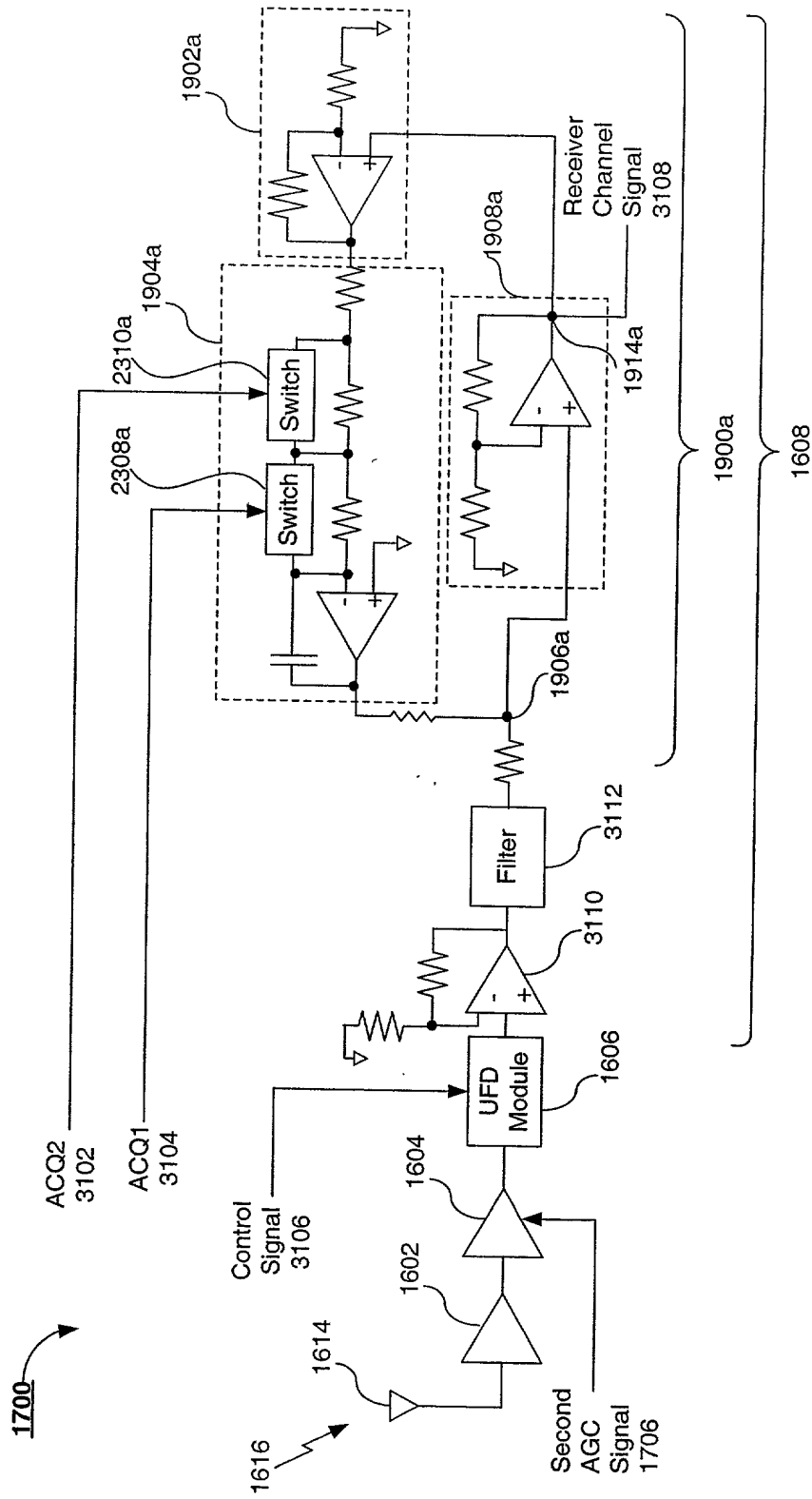


FIG. 31A

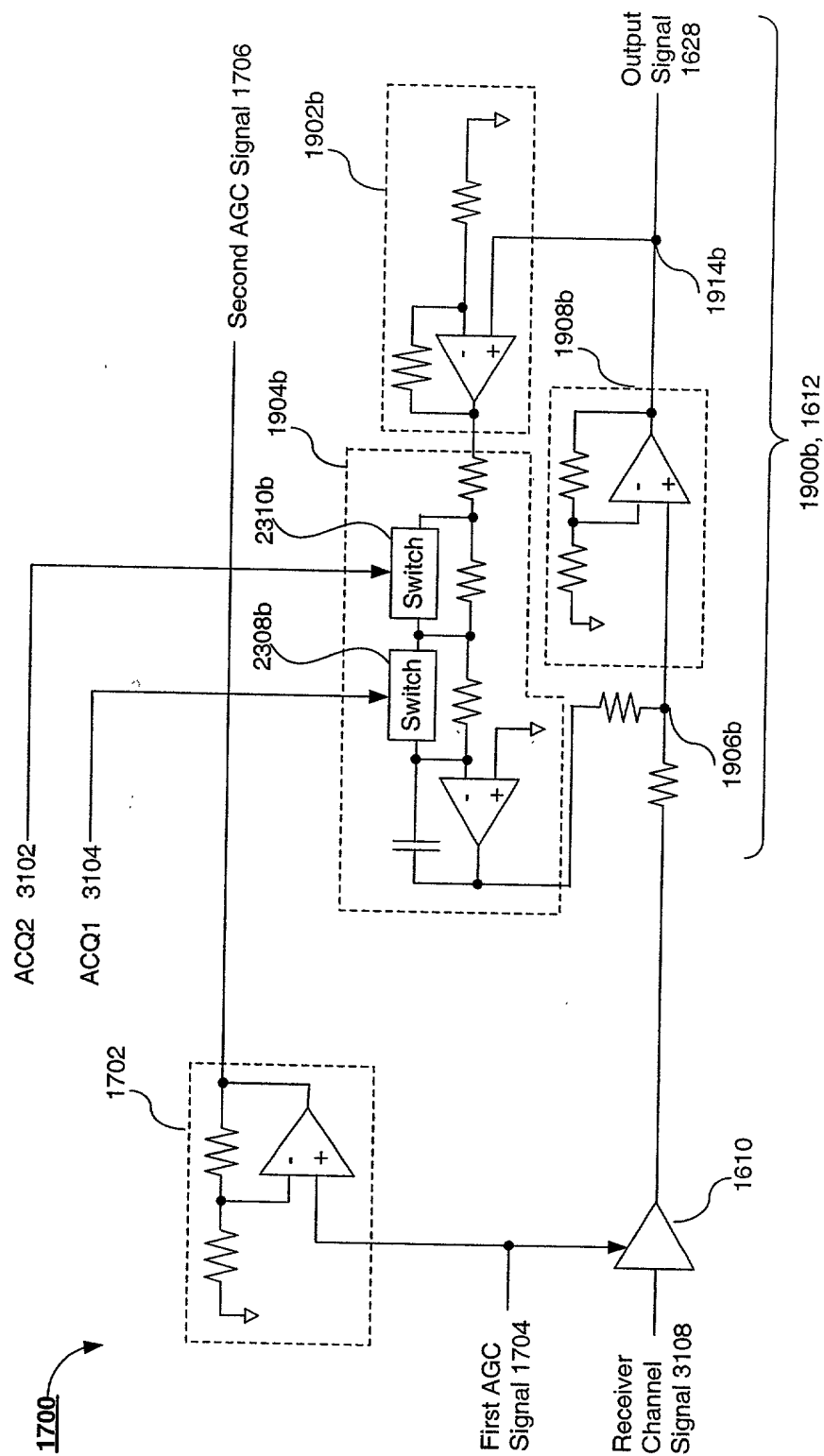
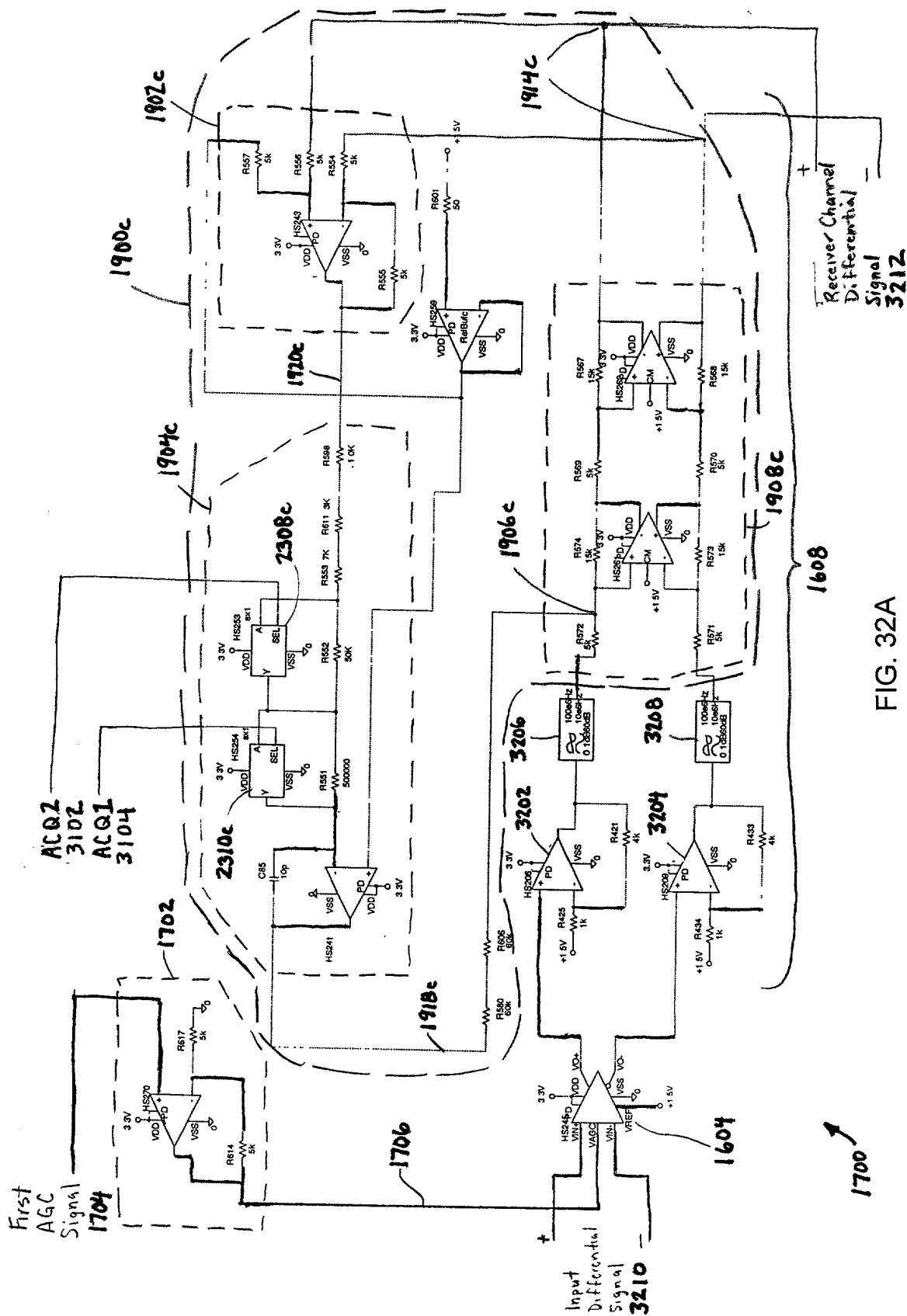
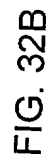


FIG. 31B





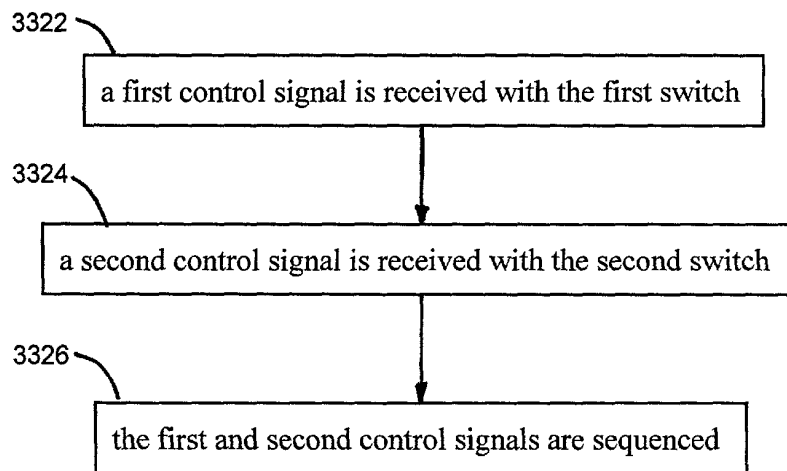


FIG. 33

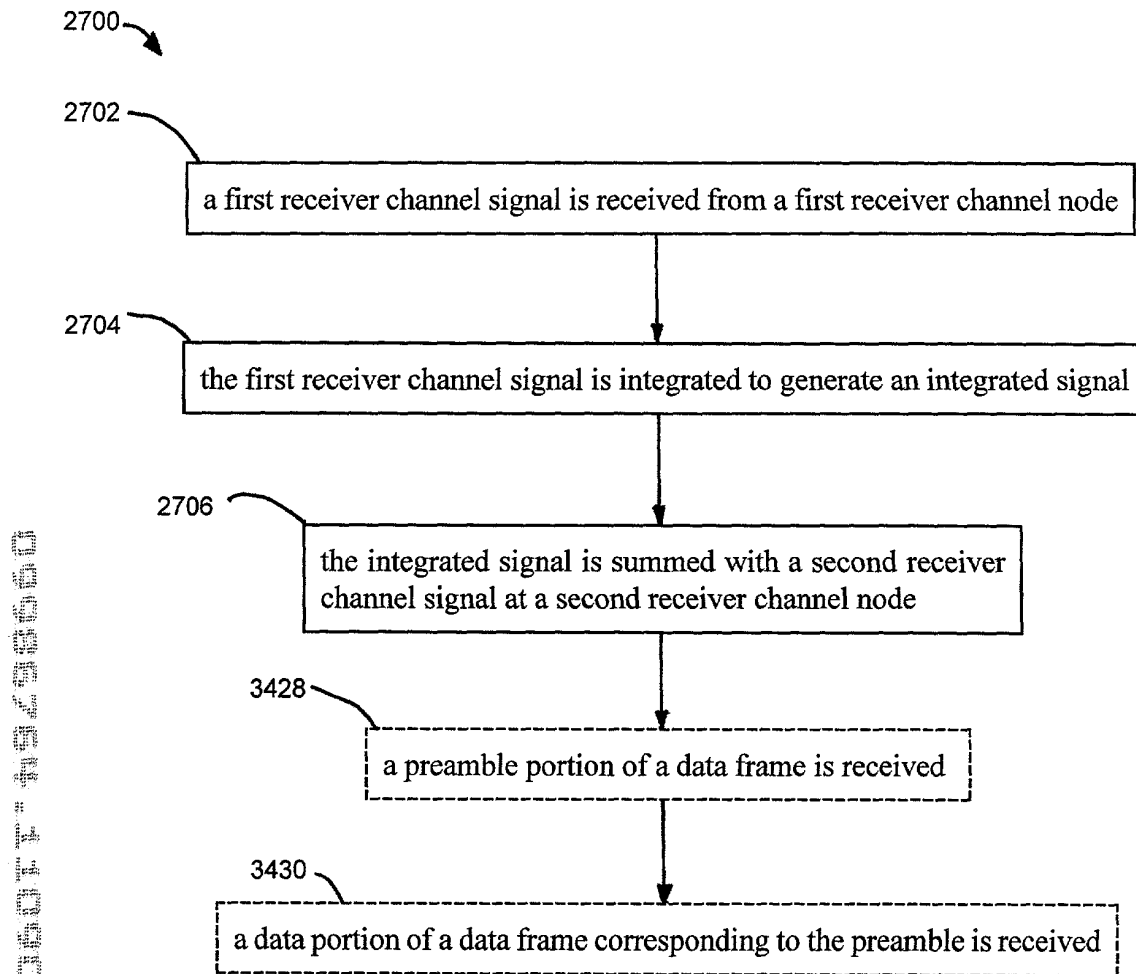


FIG. 34

TOP SECRET 49298600

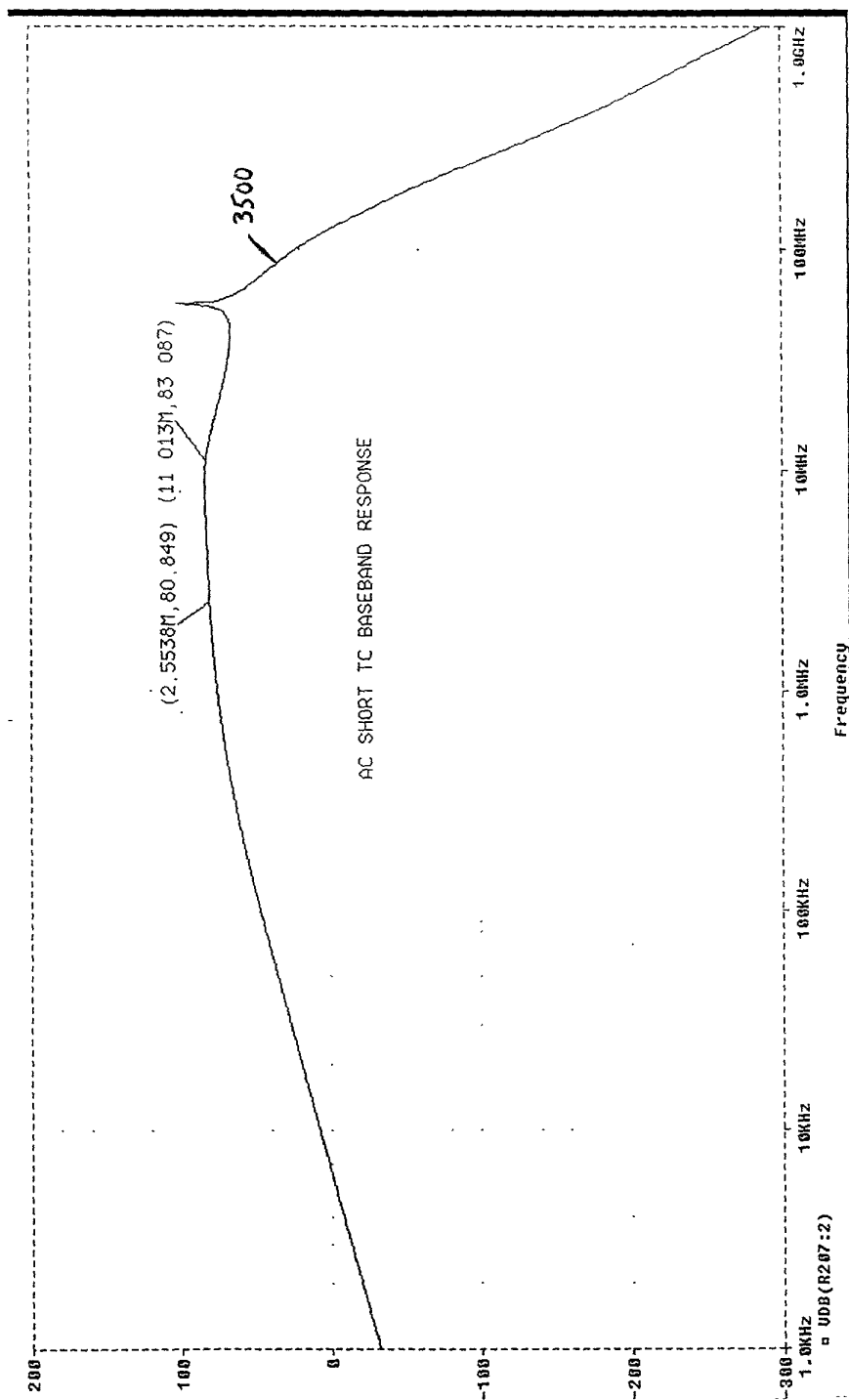


FIG. 35

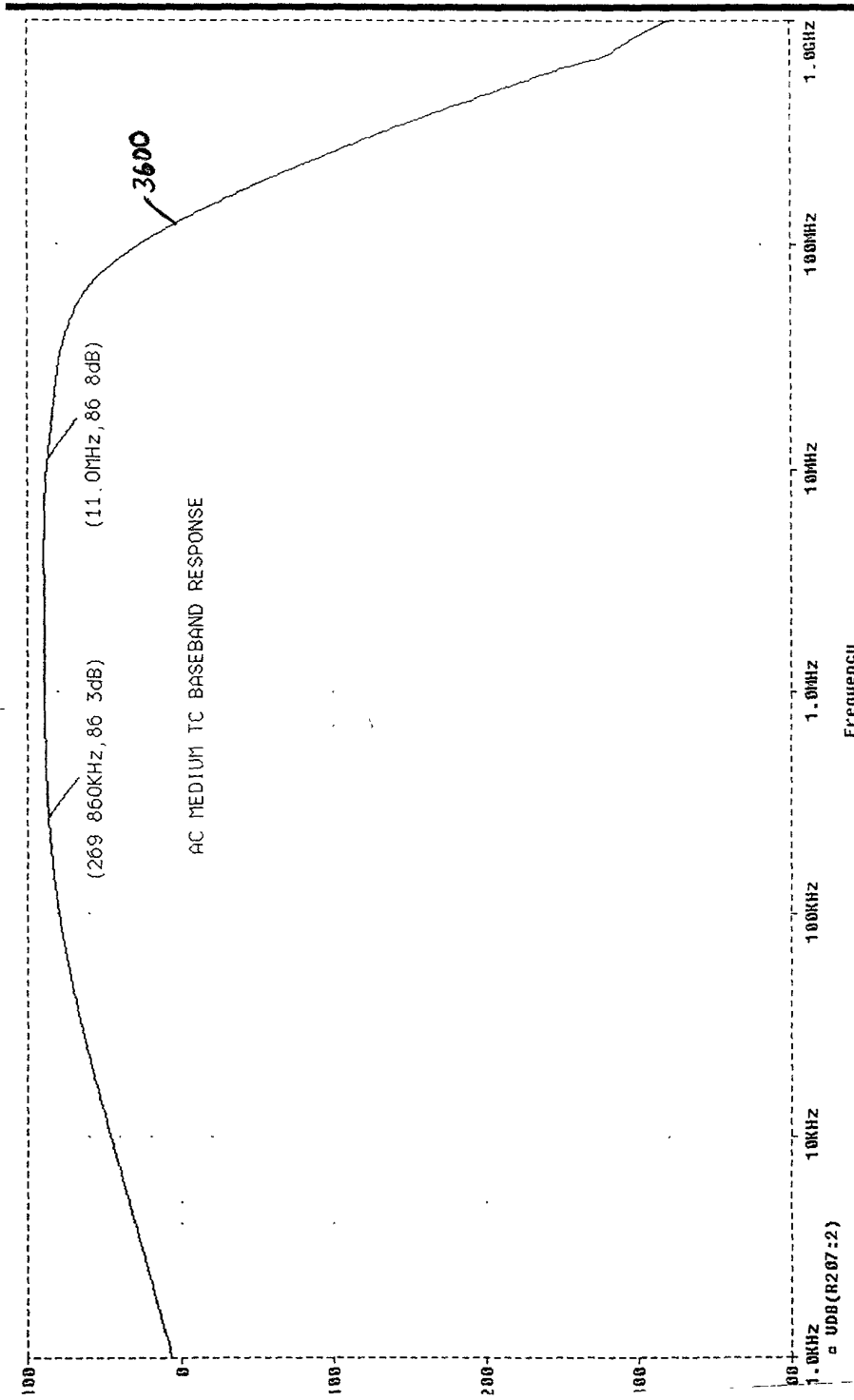


FIG. 36

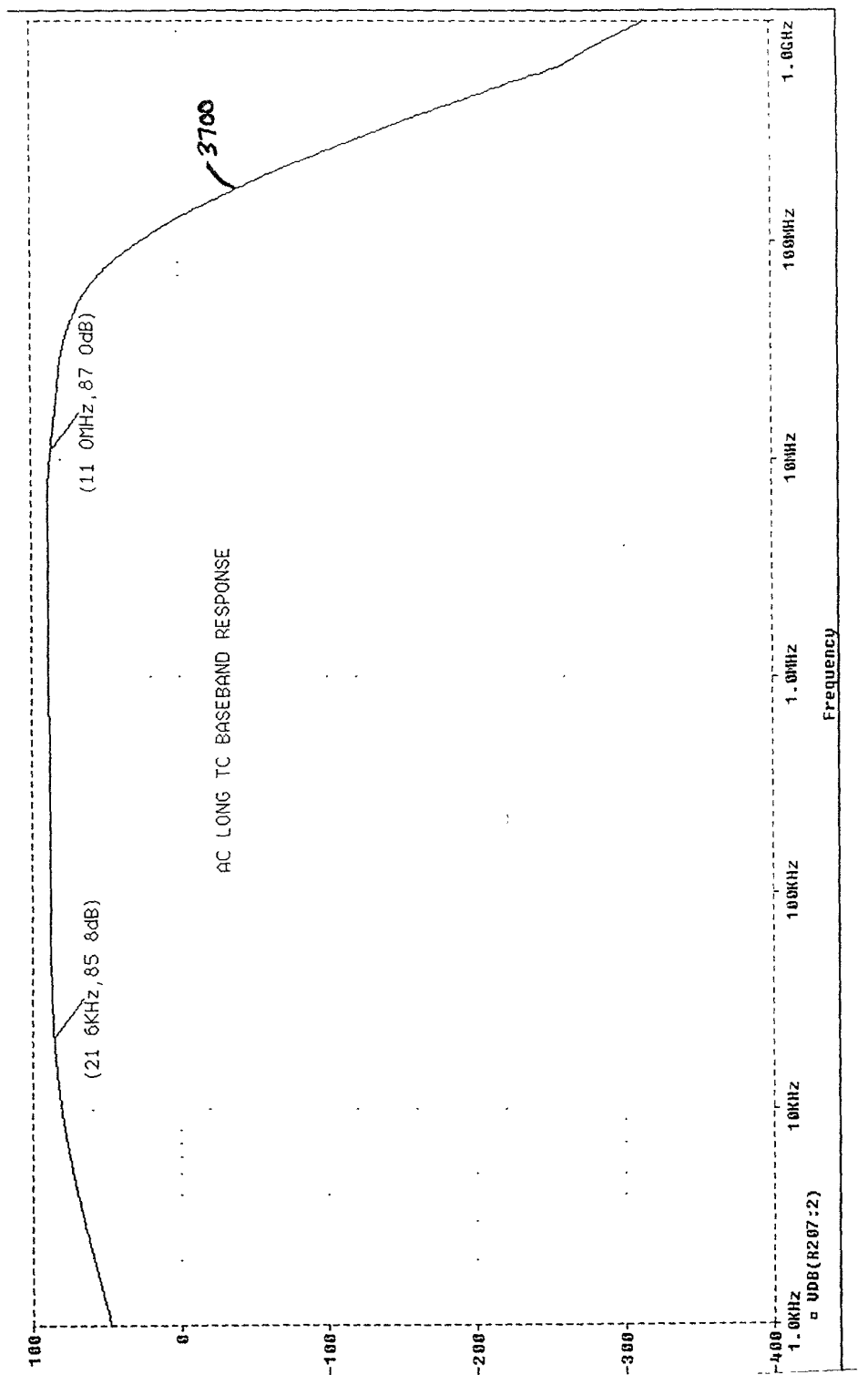


FIG. 37

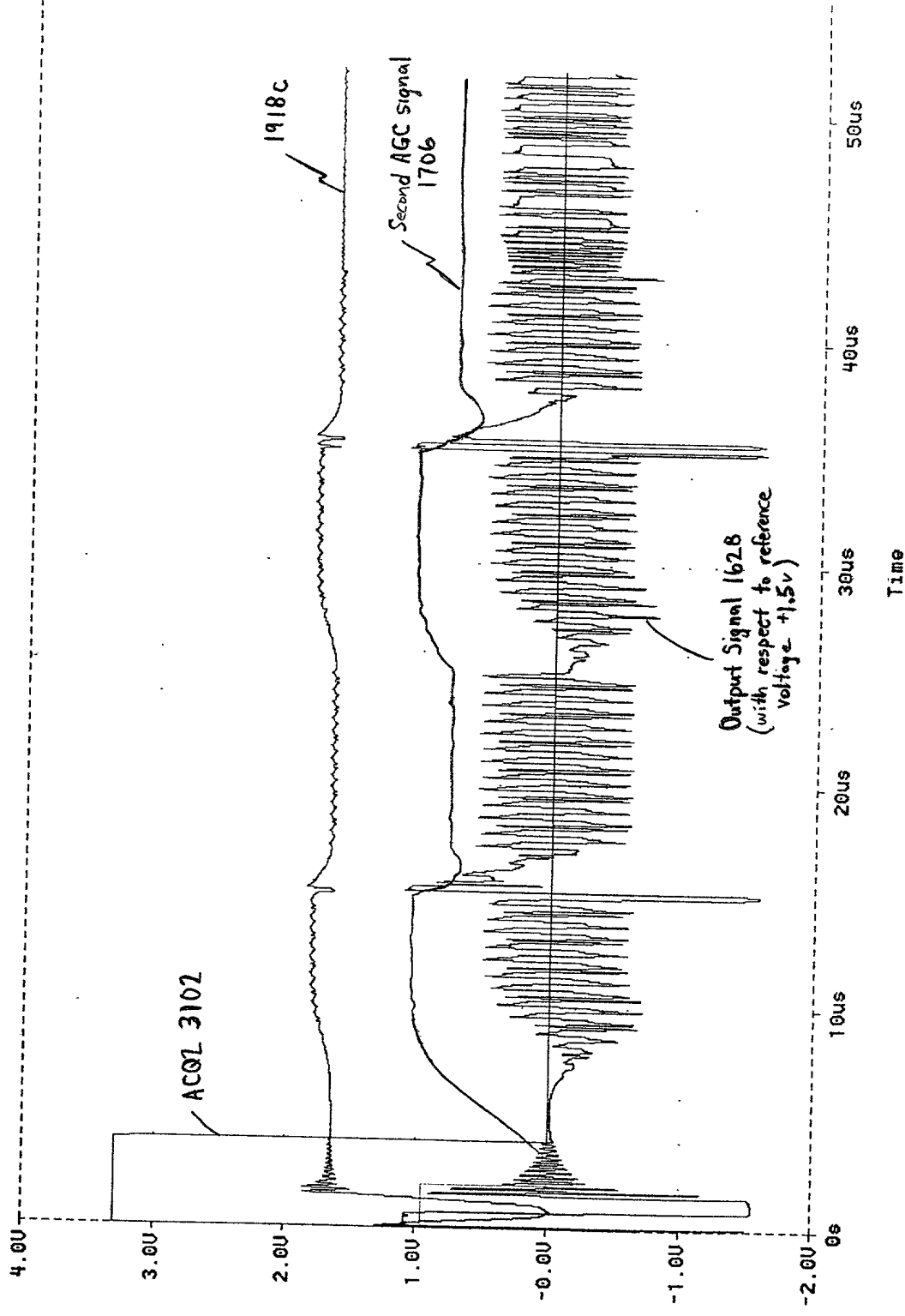


FIG. 38

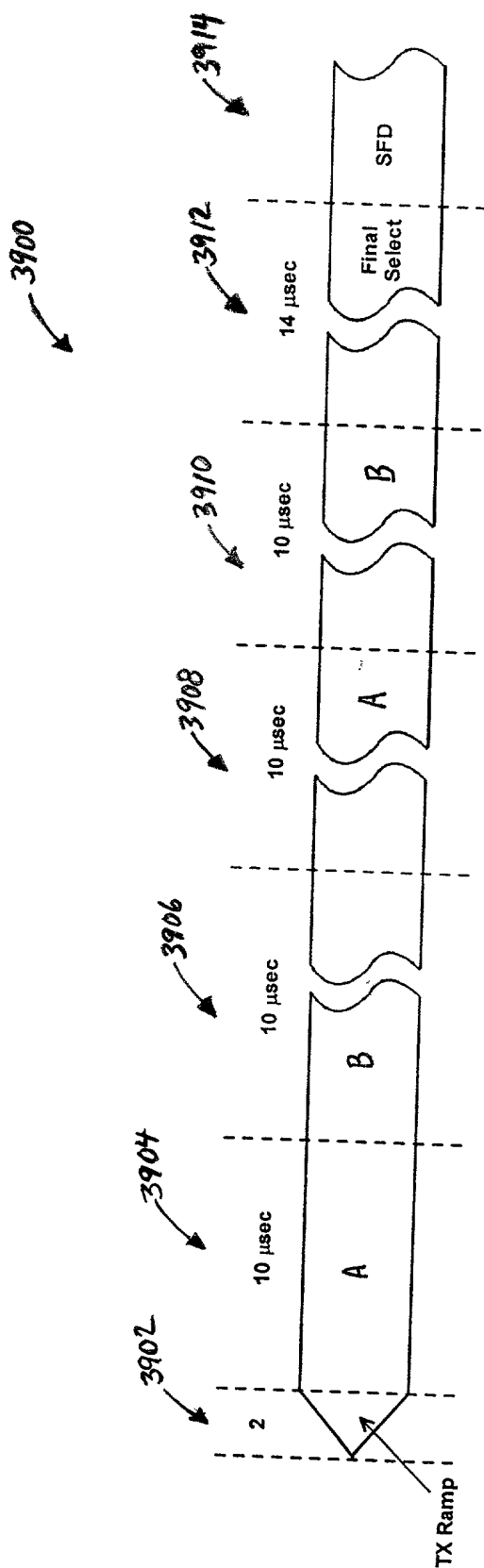


FIG. 39

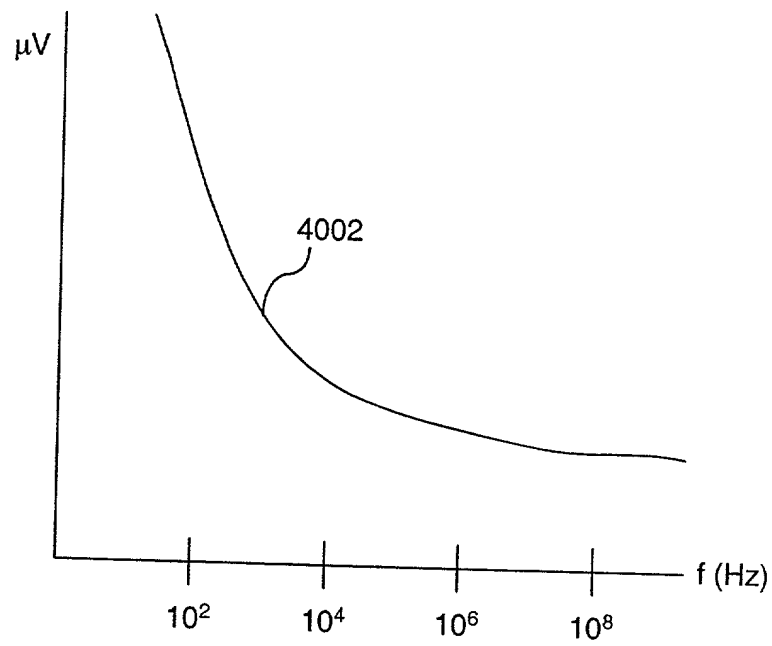


FIG. 40

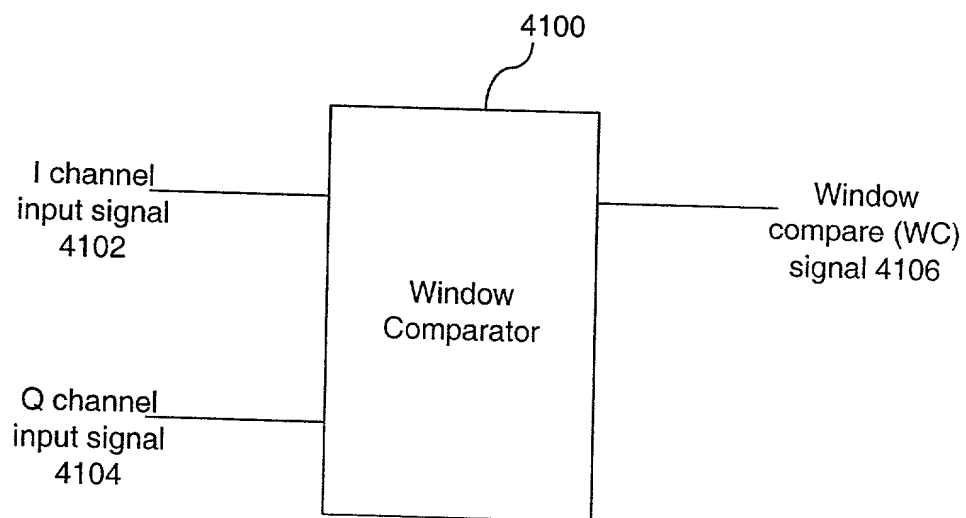


FIG. 41

4100 →

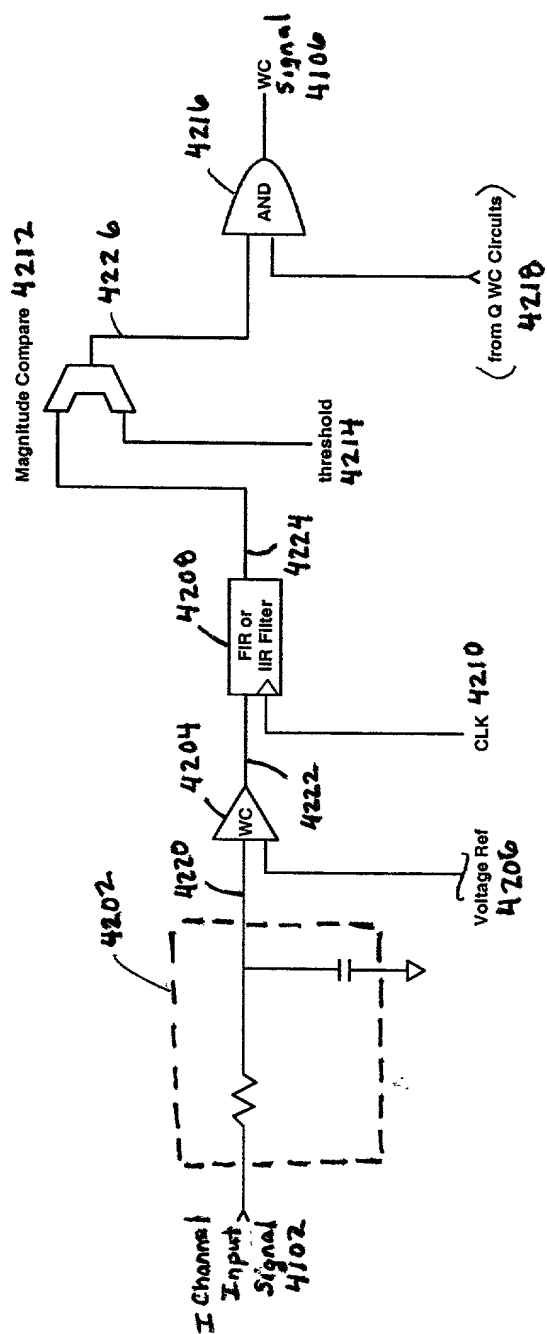


FIG. 42

4100

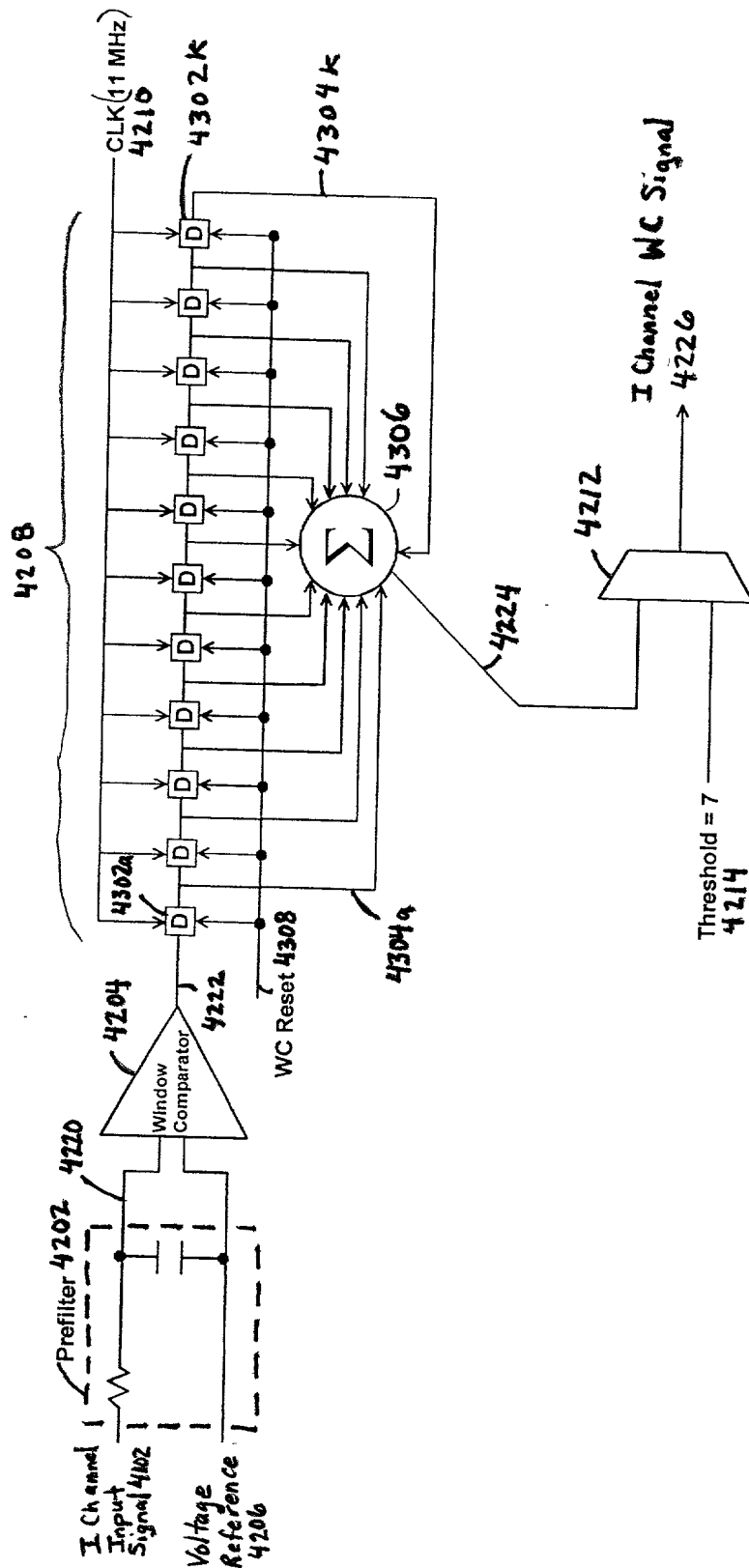


FIG. 43

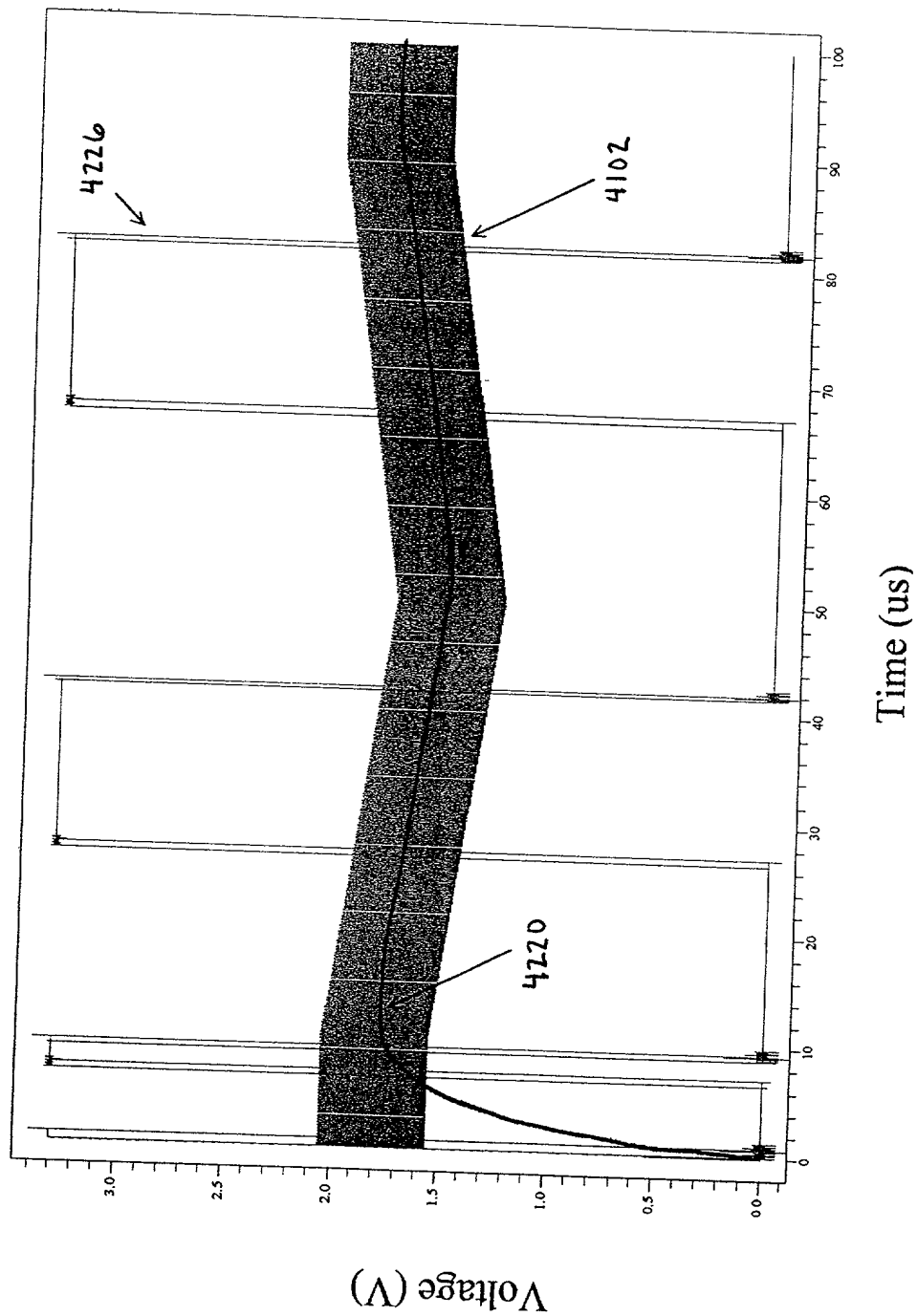


FIG. 44

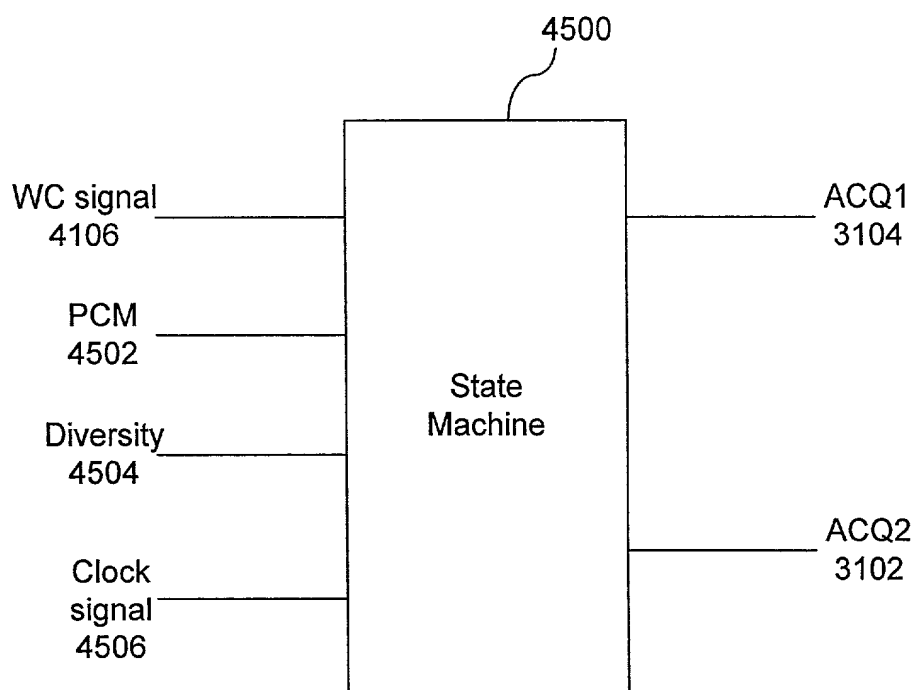


FIG. 45

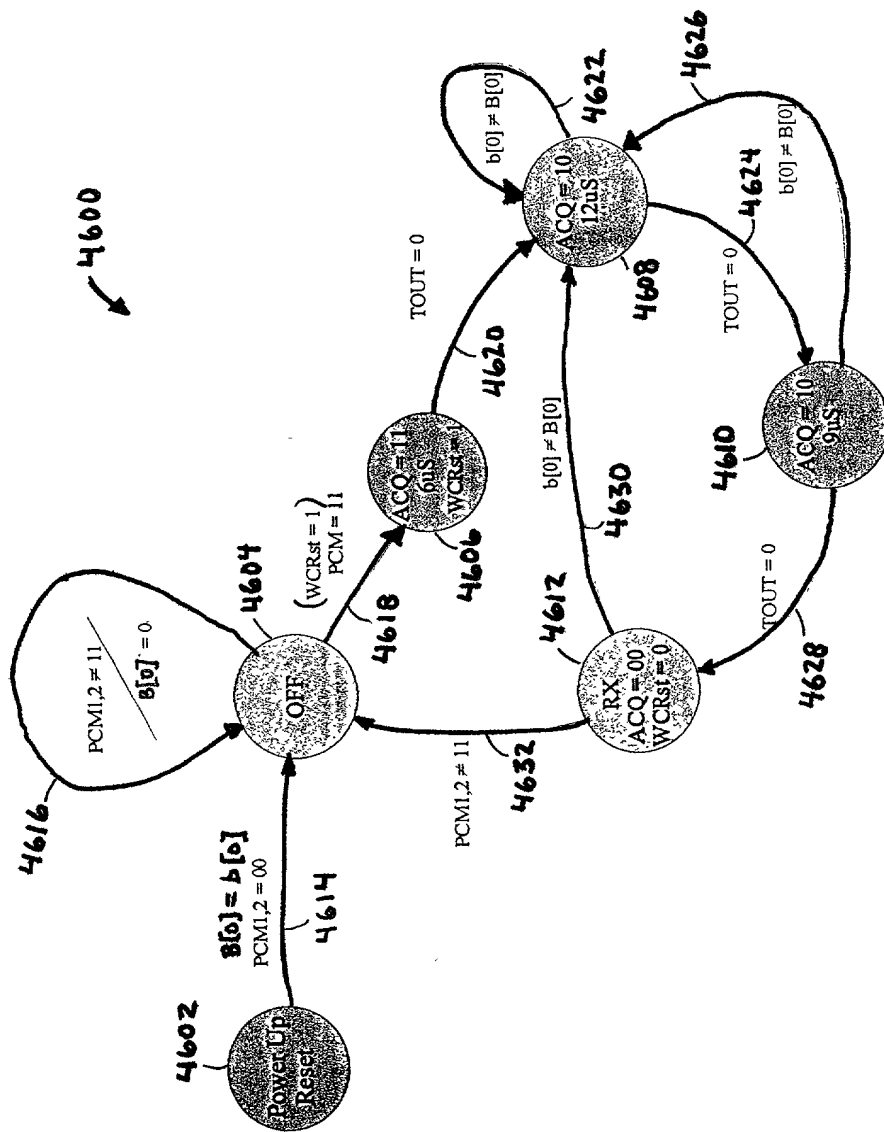


FIG. 46

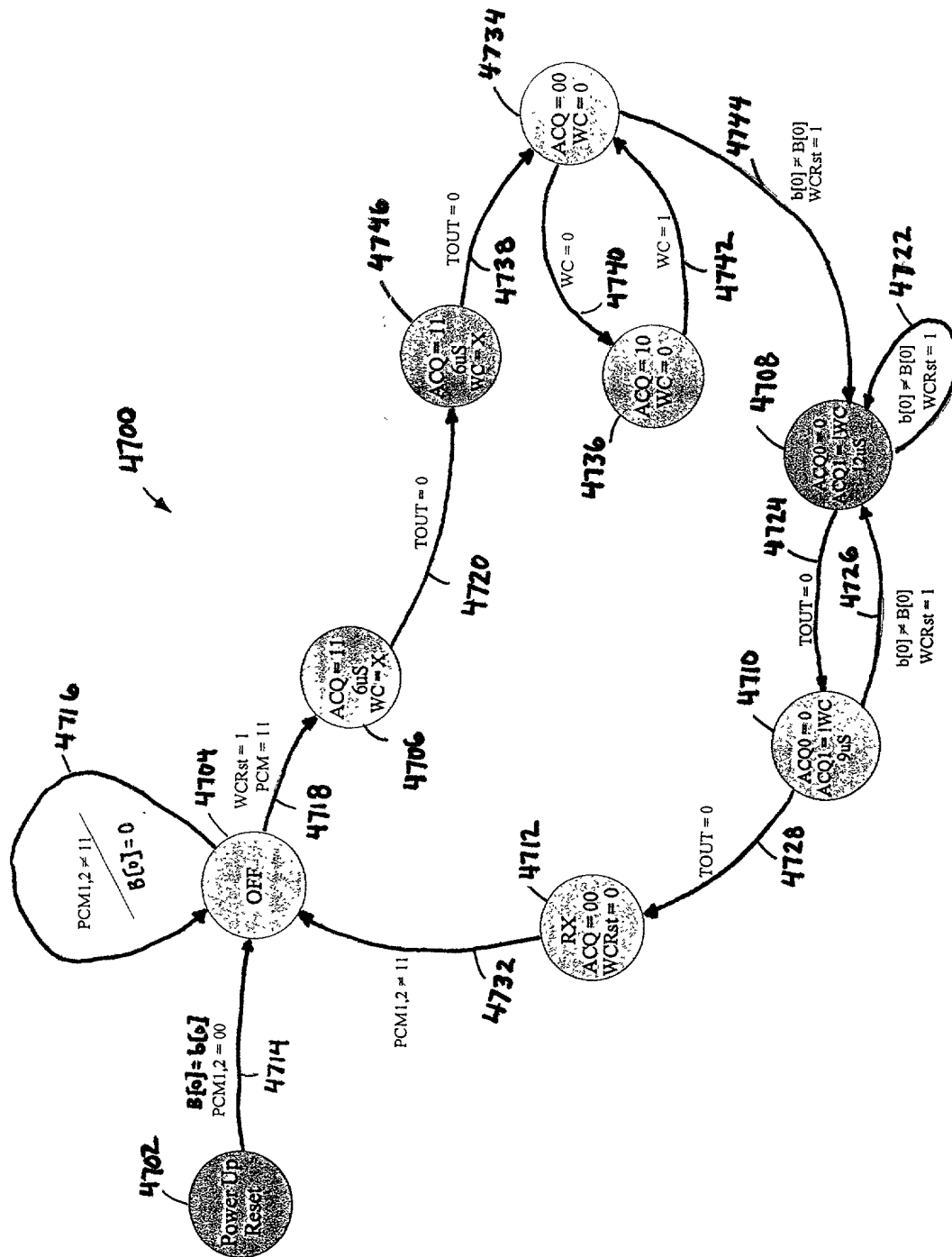


FIG. 47

4800

4802

a first AGC signal is multiplied by an amount to generate a second AGC signal

4804

the first AGC signal is provided to a first automatic gain control (AGC) amplifier coupled in a first portion of the receiver channel

4806

the second AGC signal is provided to a second AGC amplifier coupled in a second portion of the receiver channel

FIG. 48

4800

4802

a first AGC signal is multiplied by an amount to generate a second AGC signal

4804

the first AGC signal is provided to a first automatic gain control (AGC) amplifier coupled in a first portion of the receiver channel

4806

the second AGC signal is provided to a second AGC amplifier coupled in a second portion of the receiver channel

4908

The second AGC amplifier is located upstream in the receiver channel from the first AGC amplifier

FIG. 49

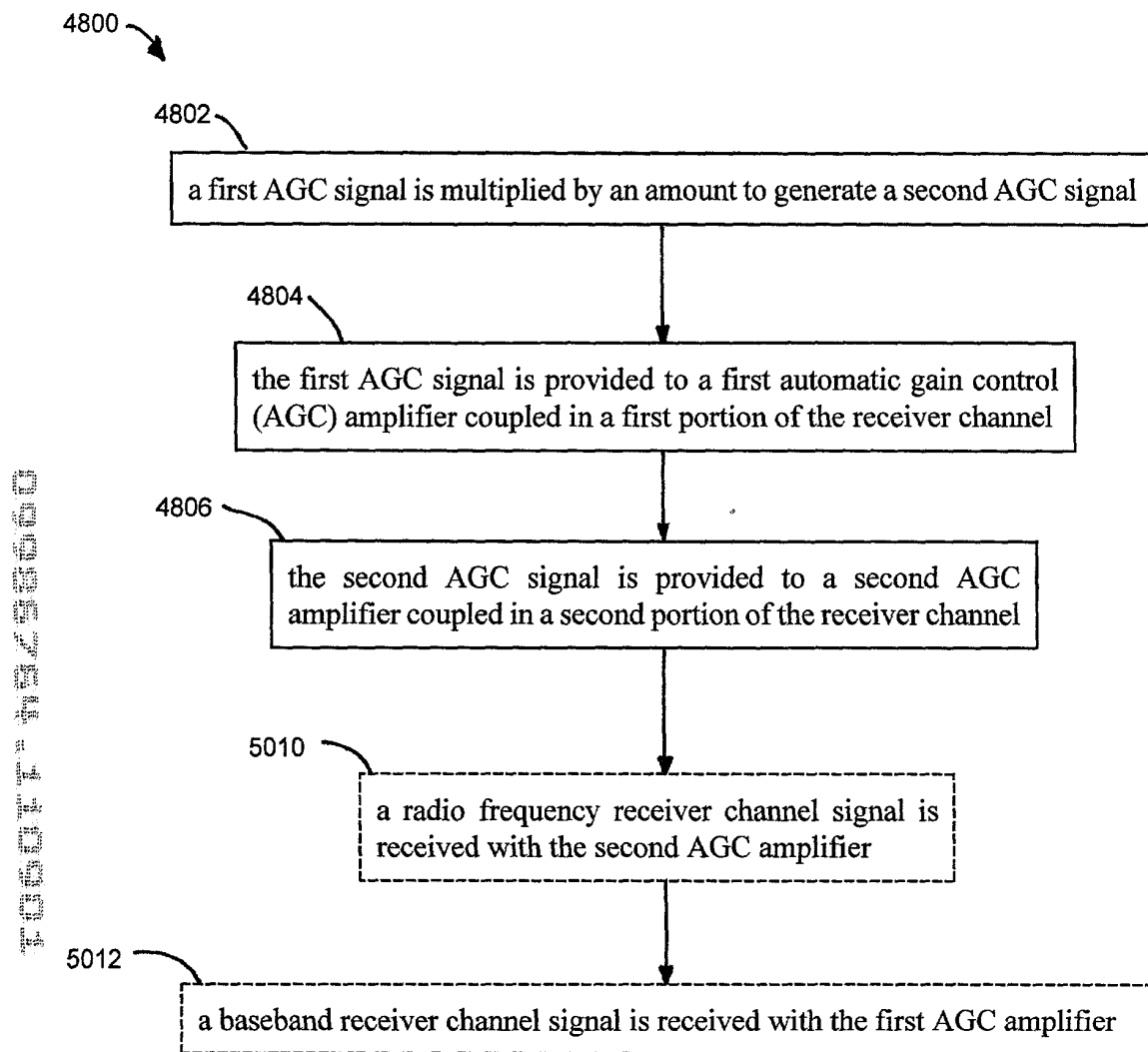


FIG. 50

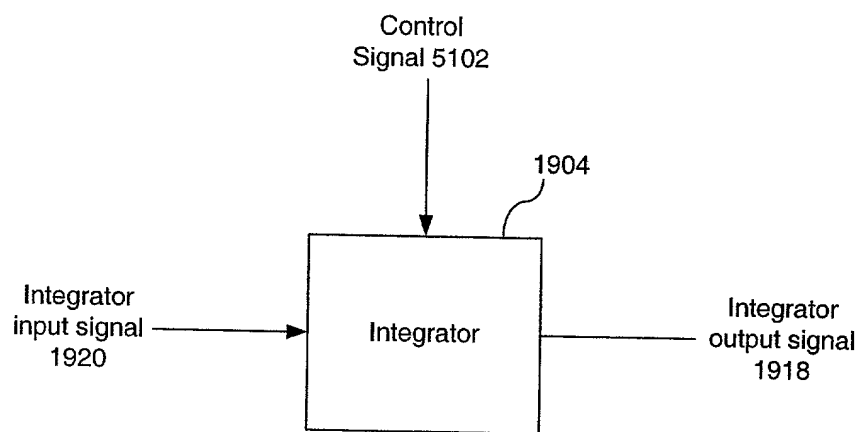


FIG. 51

4800

4802

a first AGC signal is multiplied by an amount to generate a second AGC signal

4804

the first AGC signal is provided to a first automatic gain control (AGC) amplifier coupled in a first portion of the receiver channel

4806

the second AGC signal is provided to a second AGC amplifier coupled in a second portion of the receiver channel

5214

a radio frequency receiver channel signal is received with the second AGC amplifier

5216

an intermediate frequency receiver channel signal is received with the first AGC amplifier

FIG. 52